

THE MUSICAL EDUCATION OF ACADEMICALLY GIFTED AND
TALENTED STUDENTS: TEACHERS' AND STUDENTS'
PERSPECTIVES

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A thesis submitted in partial fulfillment
of the requirements for the degree of
Bachelor of Music (Music Education) (Honours),
Sydney Conservatorium of Music,
University of Sydney.

2006

ABSTRACT

This research project has been designed as a pilot study in a specific field of educational research that has not yet been thoroughly explored. The aim of this study has been to discover the perspectives of teachers and students in academically selective contexts regarding the quality and effectiveness of their music teaching and learning experiences. These educational contexts included Academically Selective High Schools, and Opportunity Classes in New South Wales State Schools.

The themes that have been addressed in this study include the awareness of teachers of the special educational needs of their academically gifted and talented students, their ability to provide quality and appropriate music programs to these students, the issues that affect the quality of music programs in academically selective contexts, and the perceptions of the students regarding their levels of challenge and engagement in their classroom music lessons.

This is a qualitative study, designed to reveal the perspectives and opinions of the participants, and to expose significant areas for further research.

ACKNOWLEDGEMENTS

This Honours thesis represents my greatest academic endeavour to date. Whilst I have not quite been the 'model student' I had hoped to be, I have enjoyed the process of devising and conducting my own research, and interacting with practitioners and students in schools in a range of areas in Sydney. For this final product, there are a number of people who deserve my acknowledgement and my sincere thanks.

Firstly, I wish to thank all of the teachers and students whose ideas and perspectives are represented in this study. The students involved have been delightful, and their teachers have been an inspiration. Nothing impresses me more than a love of learning and a passion for teaching being fostered actively within a school.

Secondly, to my Supervisor Dr. Jennifer Rowley, for her patience and flexibility, and for guiding me through this process without simply giving me all the answers. Her criticism and praise, and her acceptance of my quirks and – at times – disorganisation have allowed me to learn at my own pace and reach my own conclusions for this study. She is very wise, and a kindred spirit in the crusade for quality education for academically gifted and talented students.

Thirdly, my thanks go to the lecturers at the Conservatorium of Music who have helped me in many different ways. To Dr. Kathy Marsh who, despite her own busy schedule, never failed to answer my questions, listen to my anecdotes of stress and frustration, or share a block of Toblerone. To Dr. Ross Gilbert and Dr. Diane Collins, who throughout my four years at the Conservatorium were always willing to give me extra guidance and offer their support and encouragement. And to Dr. Michael Webb, one of the wisest people I know, who was the best and most supportive Practicum Supervisor I could have hoped for, and who has shown great faith in me and my abilities as a student and as a teacher.

I would also like to acknowledge the teachers who have inspired and guided me throughout my education. Because of them, I have experienced how wonderful learning is, and have become passionate about creating that opportunity for other people. These people have encouraged me to achieve, and have been my confidantes – Greg Edwards, Monica White, Kerrie Ridgeway, Ray Clapshaw, and Therese Vines particularly - and I give them my most sincere thanks.

Finally, I thank my parents for their continual support of my academic endeavours. Throughout my life, they have never failed to provide me with opportunities to learn, have supported and encouraged my decisions, and have let me know that they are proud of me. Thank you many, many times over.

November, 2006

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CHAPTER ONE

INTRODUCTION

Aims of the Study

This study aims to discover the perspectives of teachers and students in academically selective educational contexts regarding the quality and effectiveness of music teaching and learning experiences for academically gifted and talented students. The perspectives of the teachers and students involved will be studied through interviews and observation sessions in Opportunity Classes and academically selective high schools in the Sydney Metropolitan area. Students in these educational contexts have met strict selection criteria, identifying them as performing academically in the top 10% of their age peers.

In terms of teachers' perspectives, the study aims to investigate the perceived quality of current music programs in academically selective schools and classes, the nature of teaching music to cognitively gifted and talented learners, and the support of the school community in the musical education of these students. The study also aims to observe music lessons and interview students, in order to determine levels of interaction in musical activities, and the perceived quality of their music learning experiences. Finally, the study will draw suggestions from the participants concerning improvements which may be made to the quality and effectiveness of their music programs.

Educational Contexts

In order to investigate the quality of music programs, it is necessary to be explicit about the special educational contexts in which this study takes place; Opportunity Classes and Academically Selective High Schools. These specialized schools and classes are prominent educational provisions for academically gifted and talented students in New South Wales (NSW Department of Education and Training, 2004). Opportunity Classes are selective classes that cater for the needs of academically gifted and talented students in years 5 and

6 of primary school, by providing them with access to a challenging curriculum and interaction with students of similar ability and maturity. In 2006 there are 114 Opportunity Classes in 72 primary schools in New South Wales. Entry is gained by demonstrating academic merit, determined by the Opportunity Class Placement Test in English, Mathematics, and General Ability, and primary school assessments of a student's performance in English and Mathematics (New South Wales Department of Education and Training, 2004, p. 10-11).

Similarly, Selective High Schools provide a challenging curriculum for students of high academic ability, and placement is determined by an English, Mathematics and General Ability test. Currently, there are 17 fully selective high schools, 9 high schools with selective classes (partially selective), and 4 agricultural high schools offering selective placement in New South Wales. The aim of an academically selective high school is to provide an "educationally enriched environment by grouping students, concentrating school resources and using specialised teaching methods" (Department of Education and Training, 2004, p. 10).

There has been much debate over the provision of education for academically gifted and talented students through Opportunity Classes and Selective High Schools. However, these provisions are directly linked to the New South Wales Department of Education and Training policy for the education of gifted and talented students, which states that "school communities have a responsibility to develop effective and equitable identification procedures and developmentally appropriate programs for gifted and talented students" (Department of Education and Training, 2004, p. 7). With the provision of an enriched curriculum and access to students of similar academic abilities, Opportunity Classes and Selective High Schools are amongst the most effective educational environments in New South Wales for students who have been identified as academically gifted and talented. The

benefits of differentiated programs and provisions will be analysed through research (Feldhusen, cited in Van Tassel-Baska, 1994; Gross, 1994; Van Tassel-Baska, 1994) that has been reviewed in the second chapter of this study.

Definitions of Terms

Because the participants in this study will be drawn from New South Wales State Schools, the definitions of 'gifted' and 'talented' offered in the *Policy and Implementation of Strategies for the Education of Gifted and Talented Students* document (2004) will be assumed throughout this study:

- Gifted students are those whose potential is distinctly above average in one or more of the following domains of human ability: intellectual, creative, social and physical.
- Talented students are those whose skills are distinctly above average in one or more areas of human performance.

The policy adds that gifted and talented students must be “given appropriate opportunities, stimulation and experiences to develop their potential” and that “the translation of giftedness into talent results from application to appropriate opportunities for learning, training and practice” (Department of Education and Training, 2004, p.8). These definitions are based on the work of Gagné (2003), which will be reviewed in the following chapter.

Previous Studies

Research into the education of gifted and talented students has been centred on the search for definitions, their characteristics, and their educational needs (Betts & Neihart, 1988; Clark, 1983; Feldhusen, 1984; Gross, 2001). Definitions of what it is to be academically gifted

and talented vary from study to study, as do the lists of characteristics that indicate exceptional abilities in a child. Controversy surrounds this area of research, as many cognitively gifted children are prevented from displaying the generally accepted characteristics of gifts and talents by physical, sensory and learning impairments (Cline & Schwartz, 1999). Similarly, previous studies have revealed a debate concerning the most effective programs for gifted and talented students. Many researchers have argued that the social needs of academically gifted and talented students must be weighed against their educational needs when placing children in targeted programs (Newland, 1976). In 1991 the New South Wales government began implementing a series of interventions as a means of ensuring a quality education for all gifted and talented students, through the *Policy and Implementation Strategies for the Education of Gifted and Talented Students* documents. These included teaching strategies, flexible progression, enrichment, specialist classes and specialist school groupings, and mentor programs. In 2004 this document was revised, with attention to year and subject acceleration, early entry, accelerated progression and grouping strategies (NSW Department of Education and Training, 2004).

Significance of the Study

Whilst much research has been conducted in the education of academically gifted and talented students, there is still a lack of support for academic achievers amongst the school and wider communities (Gross, 1999). The significance of this study lies in the need for the continued dedication of teachers and schools communities in the support of not only gifted and talented learners, but also of music education. Gross (1999) highlights the importance of nurturing intellectual giftedness by stating that “our intellectually gifted young people will indeed enhance Australia’s scientific, industrial, economic and cultural development” (pp. 10-11). She argues that “a curriculum which is differentiated in level, pace and content is an essential response” to the needs of gifted and talented students (Gross, 1999, p. 11).

These statements support the significance of this study, which aims to investigate how effectively the educational needs of these students are being met in the music learning experiences. The findings of this study are intended to support the inclusion of a quality musical education in existing programs for academically gifted and talented students.

Focus of Inquiry

The study will aim to discover the perspectives of teachers and students regarding music education in academically selective contexts through four main areas of inquiry. Firstly, to discover how effectively teachers are designing their music programs to meet the needs of their academically gifted and talented students. Secondly, to find out how engaging and challenging these programs are for the students. Thirdly, to discover if, and in which ways, the social, emotional and learning characteristics of these students affect the teaching of music in the classroom. Finally, the extent to which teachers are equipped, in terms of training and resources, to meet the needs of their academically gifted and talented students.

This research problem is justifiable and significant to the field, as all students have the right to a quality and level-appropriate education, and this study aims to explore this concept with particular reference to music education in New South Wales. Also, there is limited literature in the field that focuses on the teaching of music to academically gifted and talented students, and this concept is important in the context of Opportunity Classes and the mandatory music syllabus in Academically Selective High Schools. Finally, this study may identify problems in the teaching and learning of music in these contexts, and may provide potential solutions.

The Research Questions

The research questions for this study are:

- A. How are teachers constructing their music programs to ensure the engagement and achievement of their academically gifted and talented students?
- B. To what extent do academically gifted and talented students engaged and challenged by their school music programs?
- C. What are the issues affecting the quality of music programs in these contexts, and what improvements can be made?
- D. What are the roles and values of music education for academically gifted and talented students?

The following chapters of this study aim to explore the issues presented by the research questions. The Literature Review examines and creates links between definitions of what it means to be academically gifted and talented, the social and learning characteristics of such students, philosophies of quality teaching, and philosophies of Music Education.

The Methodology chapter discusses the appropriateness of qualitative research methods employed for this study, and outlines the procedures for data collection and analysis.

The Results chapter reports the outcomes of the research conducted, and the Discussion and Conclusion chapter presents the perspectives of the participants in close connection with the research questions and the literature, and emphasises the importance of a strong relationship between the pursuit of quality education for academically gifted and talented students, and quality Music Education.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

The purpose of this review has been to find, evaluate and integrate existing literature in the field of educating academically gifted and talented students, and establish links with literature in the field of music education. Many issues have been raised in the field of gifted and talented education, such as the problem of defining what it is to be 'gifted and talented', the process of identification, and the quality and effectiveness of targeted programs. In addition, whilst there is a wealth of literature concerning quality music education, there has been little research into the specific area of teaching music to academically gifted students. Rather, the educational development of the musically gifted child has been thoroughly explored, whilst the quality of music teaching and learning experiences in academically selective environments has not generally been considered. The literature review also aimed to provide background information and context for this study, and criteria for data analysis.

The literature in question has been reviewed in five sections. The first section considered existing definitions of giftedness and talent, and the second examined the social and learning characteristics of gifted and talented students. The third section examined past and current philosophies and policies relating to the education of gifted and talented students, including the social and educational criteria for quality teaching and learning programs. In the fourth section research and policies relating to quality music education have been reviewed. In the final section the specific relationship between gifted and talented students and music education, and the need for more research in this area, have been examined.

Defining 'Gifted and Talented'

Across the research field there are various definitions of the term 'gifted and talented'.

Issues of systematic identification and defining giftedness in students who are underachieving have also emerged from the literature.

Piirto (1994) presented a series of definitions and past concepts of giftedness and talent.

She quotes the definition of the Marland Report (Marland, 1971, cited in Piirto, 1994) which states that "gifted and talented children are those identified by professionally qualified persons who by virtue of outstanding abilities are capable of high performance" (p. 7). This definition has also been explored by Gagné (1985) who stated that it was "embodied in the 1978 Gifted and Talented Children Act" (p. 103). Whilst it marked the beginning of a series of studies on the identification and education of gifted and talented children, the Marland Report only defined giftedness and talent in the context of professional recognition, and did not accommodate issues of talent development or underachievement in gifted children.

In Australia, research into the definition of the term 'gifted and talented' has produced similarly complex results. In 1988, the Report by the Senate Select Committee on the Education of Gifted and Talented Children states that "the concept of giftedness is so complex that it is difficult to arrive at a single satisfactory definition" and that "the various definitions of giftedness range from specific, precise, hard data definitions based on percentage scores or IQ tests to vague, generally-worded concepts emphasising student behaviour or even potential ability" (Senate Select Committee, 1988, p.29).

In a report for the British National Association for Able Children in Education, Hymer and Michel (2002) state that "robust, reliable and educationally authentic definitions of giftedness and talent are elusive" (p.9). They consider a "fairly traditional definition" of giftedness, which claims a "more able student" to be "that individual who is consistently

functioning at a level two or more years in advance of the majority of his or her same-age peers – in at least one area of the formal curriculum” (Hymer & Michel, 2002, p.9). The strengths and weaknesses of this definition are outlined; its recognition of the need for all schools to provide for their more able students is weighed against its failure to represent the underachieving student and its “limp acceptance” of the knowledge-based curriculum as the only recognised domain for the assessment of outstanding achievement (Hymer & Michel, 2002, p.9).

Hymer and Michel (2002) also present and discuss existing studies in giftedness, and Renzulli’s (1979) three-ring model which labels “above average ability, task commitment, and creativity” as the characteristics of a gifted individual (Hymer & Michel, 2002, p.13). Gagné (1985) also examines the Renzulli model, stating that “in order for giftedness to become manifest, these three components should be simultaneously present and must take root in the same area of performance” (Gagné, 1985, p. 104). Whilst this model makes links between psychological traits and general and specific performance domains, it is inapplicable to gifted students who may be underachieving, as it recognises the “presence of motivation as an essential component of giftedness” (Gagné, 1985, p. 105). The complex issue of defining giftedness in underachieving students is emphasised by Cline and Schwartz (1999), who state that the failure of school systems to accommodate gifted students is due to an

inability to identify which students are gifted and our lack of attention to special populations of gifted that have been underserved, such as children with physical/ sensory impairments or learning disabilities, ethnic minorities, young gifted children, and underachieving children (p.3).

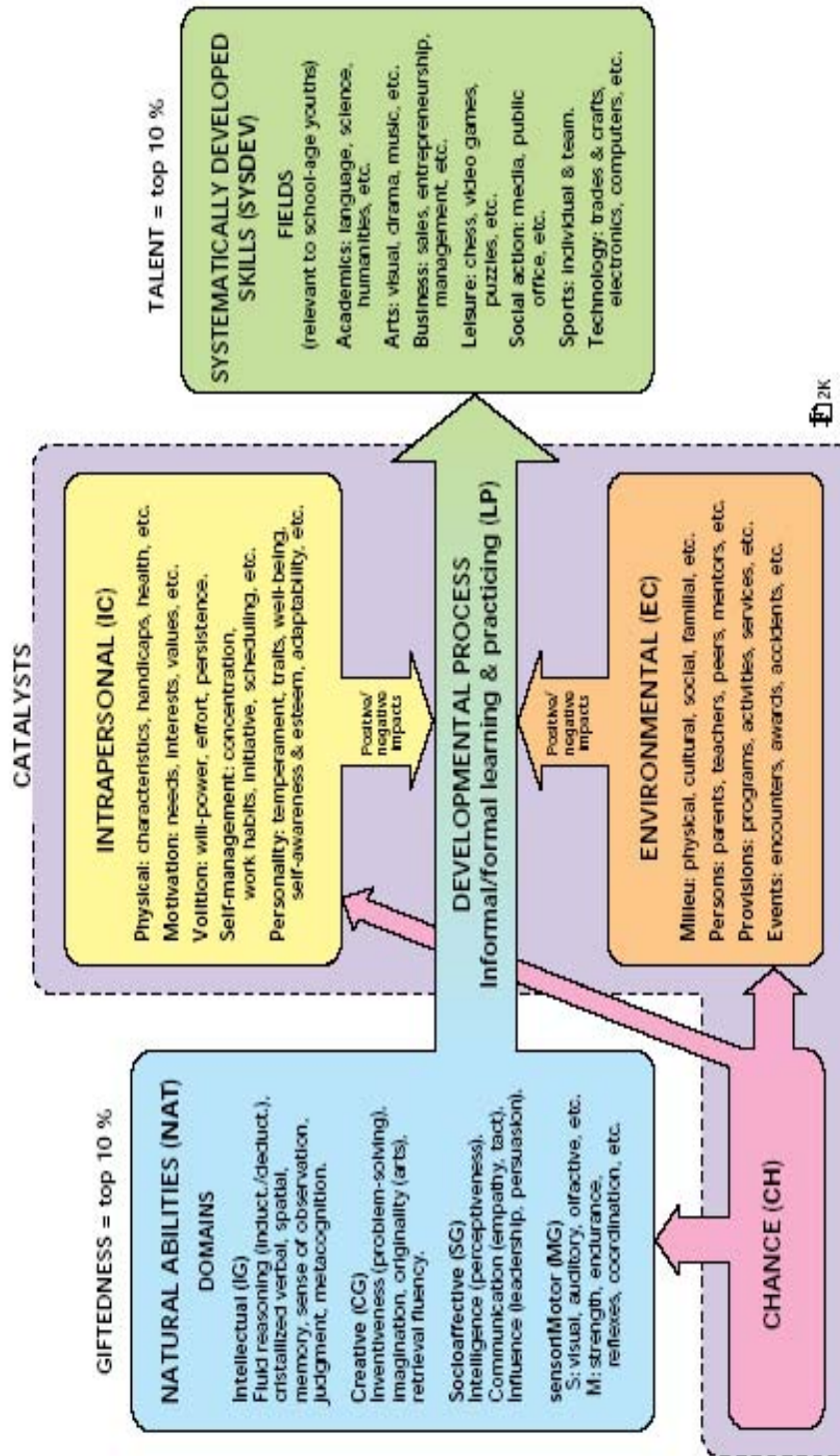
This statement refers to the lack of support for gifted children who do not demonstrate task commitment or above average performance. Whilst the students in this study have already been identified as academically gifted and talented by a standardised testing

procedure, teachers in academically selective environments must be aware of the ways in which their students learn, and must recognise that gifted and talented students may still lack motivation and may underachieve.

Gardner's (2004) psychological theory of multiple intelligences suggests that intelligence and giftedness may be manifested in many different domains, such as kinaesthetic, musical, spatial, mathematical, linguistic or analytical, and that the ability to commit to tasks and memorise knowledge is only a small aspect of giftedness. Knowledge of this principle is important for teachers in academically selective environments, as they should aim to create programs that will cater for the various academic strengths and weaknesses that may be evident amongst their students.

In response to earlier definitions, Gagné (2003) proposes a differentiated model for defining the concepts of giftedness and talent. He argues that "most professionals in gifted education do not distinguish between *giftedness* and *talent*" (p. 60), and that these two terms have become synonymous. The *Differentiated Model of Giftedness and Talent* (See *Figure 1*), however, defines these terms as clearly distinct and separate concepts. According to Gagné's (2003) definitions:

Giftedness designates the possession and use of untrained and spontaneously expressed natural abilities...in at least one ability domain, to a degree that places an individual at least among the top 10 percent of age peers. Talent designates the superior mastery of systematically developed abilities (or skills) and knowledge in at least one field of human activity to a degree that places an individual at least among the top 10 percent of age peers who are or have been active in that field or fields (p. 60).



Gagne's Differentiated Model of Giftedness and Talent (DMGT.EN.2K)

Figure 1: Gagne's Differentiated Model of Giftedness and Talent

Hence, Gagné (2003) argues that gifts and talents are not interdependent. His model suggests that whilst an individual may possess *gifts* in particular domains, they cannot be labelled *talents* unless they are systematically realised and become achievements. Gagné refers to this realisation as the “talent development process”, and presents a number of influences that may affect it, namely “intrapersonal catalysts (IC), environmental catalysts (EC), learning/practice (LP), and chance (C)” (p.60).

According to Gagné (2003), intrapersonal catalysts refer to physical and psychological factors in the talent development process. For example, physical factors in the development of proficiency on a musical instrument might include the size of a child’s hand, whilst the development of talent in dance may be assisted by height, slenderness and the length of a child’s legs (Gagné, 2003, p. 64). Similarly, psychological catalysts have been divided into four categories; *motivation, volition, self-management, and personality* (Gagné, 2003, p.64). Whilst these personality traits may assist a child in developing their gifts into talents, teachers must be aware that not all gifted children will possess these traits. Consequently, many gifted children require attention and assistance from teachers and mentors in order to manifest their gifts as tangible talents.

Environmental catalysts have also been divided into four categories, namely *milieu or surroundings, significant persons* such as educators and family members, *provisions*, and *significant events*. Educators of the gifted and talented, are among the most influential of the environmental catalysts, and may impact significantly on the development of talents amongst their students. In particular, Gagné refers to the “provisions category”, and analyses the three traditional methods of provision for gifted learners, namely “enrichment, grouping, and acceleration” (Gagné, 2003, p.65). Gagné argues that this “triarchic distinction suffers from two major logical flaws”, as it opposes enrichment and acceleration, and implies that enrichment is not a “general goal in all provisions for gifted or

talented youngsters” (Gagné, 2003, p. 65). He suggests that provisions should be categorized according to two criteria, namely the presence or absence of acceleration, and the presence or absence of ability grouping, and that enrichment be the common goal of all provisions (Gagné, 2003, p.65). Educators should be aware of the provisions available within their school for gifted learners, and work to create teaching and learning programs that will enrich and enhance the talent development process.

The chance catalyst refers to events and circumstances over which students have no control but which may affect the development the talent development process, such as socio-economic status, hereditary characteristics, and physical disability (Gagné, 2003, p. 66). The learning/practice catalyst refers directly to the application of time in developing a talent from a gift, such as learning and mastering a musical instrument or training in a particular sport (Gagné. 2003, p. 68). Whilst a teacher is not directly responsible for these catalysts, an awareness of their influence in the talent development process is essential if they are to offer an appropriate and effective education to their gifted students.

McPherson and Williamon (2006) relate Gagné’s (2003) differentiated model of giftedness and talent directly to the systematic development of musical gifts into talents. They refer to the cultivation of talents as a developmental process, and states that “in terms of music, it can refer to a range of competencies that encompass defined talents in performing, improvising, composing, arranging, analysing, appraising, conducting and teaching” (p.241).

McPherson and Williamon (2006) also state:

Most importantly, superior talents in particular fields, such as performing or creating music, emerge when a child’s natural abilities are mediated, not only through the support of intrapersonal and environmental catalysts, but also through systematic learning and extensive practice (McPherson, 2006, p.241).

The NSW Department of Education and Training Policy and Implementation Strategies for the Education of Gifted and Talented Students (2004) adopts the definitions of giftedness

and talent presented in Gagné's Differentiated Model of Giftedness and Talent (2003).

Based on the definition of talent as a developmental concept, the policy states that "it is critical that gifted and talented students be given appropriate opportunity, stimulation and experiences to develop their potential" (New South Wales Department of Education and Training, 2004, p.6).

Gross (1999) also discusses Gagné's (1985) differentiated model of giftedness and talent, stating that "the key to Gagne's view of giftedness is that it defines outstanding potential rather than outstanding performance. This model also recognises that many gifted students, particularly those who are intellectually gifted, underachieve significantly throughout their school years" (p.8). This statement is relevant to teachers in academically selective contexts, because whilst their students have been identified as gifted and talented, they must still provide opportunities and support for their students as part of the talent development process. Specifically, this is relevant in the music classroom because many students may not have had access to systematic musical training or music learning experiences. Teachers must aim to provide quality music teaching and learning experiences in order to best facilitate the development of talents amongst their students.

Characteristics of Gifted and Talented Students

The social, emotional and learning-related characteristics of gifted and talented students are closely linked with the definition process. Consequently, extensive and varied lists of the characteristics of gifted and talented students exist in the field of literature.

Pirto (1994) quotes the following list from the Marland Report (1972) of attributes that may be displayed by gifted and talented students, "singly or in combination: general intellectual ability, specific academic aptitude, creative or productive thinking, leadership ability, visual and performing arts ability, psychomotor ability"(p.7). The Marland Report

(1972) was one of the major early studies in the education of gifted and talented students, and was followed by a number of studies that produced various lists of the characteristics of such students.

Clark (1983) presents a series of differential characteristics of gifted students, organised into cognitive, affective, physical, intuitive, and societal concepts, to “closely approximate the functions available in the human brain” (p. 90). Each of the characteristics are accompanied by “examples of related needs” and “possible concomitant problems” (Clark, 1983, pp. 91-99). In an adaptation of this study, Gross, McLeod and Pretorius (2001) present a similar list of characteristics, accompanied by “possible negative classroom behaviours”, “some classroom needs” and “resultant positive classroom behaviours” (pp. 22-23). These characteristics include heightened levels of curiosity, the ability to handle abstract ideas, alert and subtle sense of humour, advanced reading ability, excellent retention of knowledge, strong feelings and opinions, and a preference for “unusual, original and creative responses” (pp. 22-23). It is important for teachers in academically selective environments to be aware of these characteristics and behaviours, and to be able to address the classroom needs that are associated with them.

Similarly, Betts and Neihart (1988) have developed six profiles of gifted and talented students, and collected lists of “feelings and attitudes, behaviours, needs, adults’ and peers’ perceptions” and methods of identification associated with each profile (p. 250). The study also suggests systems of support for each ‘type’, both within the school and in the home. The six ‘types’ of gifted child are: a) the successful, who generally have positive self concepts and achieve well; b) the underground, who tend to hide their giftedness in order to ‘fit in’ with their age peers; c) the dropouts, who are “bitter and resentful as a result of feeling rejected and neglected” by school systems (p. 252); d) the double-labelled, who are also physically or emotionally handicapped, “do not exhibit behaviours that schools look for

in the gifted” and may feel “discouraged, frustrated, rejected, helpless or isolated” (p. 252); and f) the autonomous learners, who are independent and self-directed and “are able to express their feelings, goals, and needs freely and appropriately” (p.252). The notion that not all gifted students display the characteristics that schools and communities would expect, such as motivation and high achievement, is integral to the teaching of academically gifted and talented students. Teachers need to be aware of the various behaviours and attitudes that gifted children may display, and learn to accommodate them and provide opportunities for these students in their classroom programs.

Gross (2000) presents a model of the levels of cognitive giftedness, and the social and learning characteristics of each group. She divides the groups according to IQ range, as follows: mildly (or basically) gifted, IQ range 115-129; moderately gifted, IQ range 130-144; highly gifted, IQ range 145-159; exceptionally gifted, IQ range 160-179; and profoundly gifted, IQ range 180 and above. Gross (2000) emphasises that these categories refer to “academic *potential*, rather than school performance” (p. 4). Each of these groups displays a variety of characteristics, particularly in areas of socio-affective development. Gross (2000) argues that pressure to conform to the social trends of age-peers and the failure of school systems to accommodate their learning needs can impact upon the self concept and social behaviour of exceptionally and profoundly gifted students. She states, “the influence on the gifted student of his or her awareness of being different, and the resultant pressure to underachieve for peer acceptance, can hardly be overestimated” (Gross, 2000, p.6).

Classroom teachers must be aware of the social behaviour and self-concept of their exceptionally and profoundly gifted students, in order to nurture and encourage the development of their giftedness into talents and achievements.

Treffinger (1991) divides his list of perceived characteristics of gifted and talented children into three categories; above average ability, creativity and task commitment, similar to the

aspects of the Renzulli model (1979). The characteristics of above average ability include advanced vocabulary, good memory, the ability to learn new things quickly and easily, comprehension of new ideas and the ability to see similarities, differences and relationships, and the understanding of cause and effect. A creative child will use materials in unexpected ways, take risks, think independently, be sensitive to paradoxes, show originality, and combine or transform ideas and objects. Finally, the task committed child displays intense involvement in interests of their own choosing, motivation to complete meaningful tasks, perseverance, high energy levels, and responsibility for important tasks (pp. 33-34). This list is varied and encompasses many of the likely characteristics of academically gifted and talented children.

However, Cline and Schwartz (1999) present a series of characteristics for gifted children with sensory impairments or learning disabilities. According to this study, giftedness in children with sensory impairments may be revealed through alternative modes of communication such as visual, nonverbal and/or body language. A gifted child with learning disabilities may display strong verbal language, strong problem solving skills, extreme curiosity, leadership abilities and creativity, not necessarily related to academic tasks. In fact, such children may display lack of attention, motivation and self concept, and deficiencies in academic areas such as mathematics or reading. These learning disabilities can often cause a gifted or talented child to be overlooked by many conventional methods of identification.

Educating Gifted and Talented Students

Whilst the definition of giftedness and talent offered by Marland (1971) is arguably narrow, his opinion concerning educational programs for the gifted is shared by many researchers. Marland states that gifted children “require differentiated programs and/or services

beyond those normally provided by the regular school program in order to realise their contribution to self and society” (Marland, 1979, in Piirto, 1994, p.7). This statement allows for the education of both high achieving gifted students and those with disabilities.

Many educators and scholars have debated the issue of separating gifted and talented students into targeted educational programs. This is a sensitive issue, as it is not only the academic and artistic needs of these students, but also their social needs which must be considered when designing their education.

Newland (1976) addresses many of the issues involved in establishing programs for the gifted and talented. He discusses issues of school population and setting, the use of funds and resources, program objectives, and integration and isolation. In reference to this last issue, Newland claims that gifted and talented students

face the social task of effectively reconciling the unique paradox of developing and maintaining positive interpersonal relationships and of being able to enjoy their need for and right to significant, and probably varying degrees of “splendid isolation (p.145).

For the education of the gifted and talented, Hymer and Michel (2002) encourage a “broad, balanced and appropriate curriculum”, the use of “differentiated educational provision in the classroom through curriculum enrichment and extension” and a commitment to the “personal, social and intellectual development of the whole young person” (Hymer & Michel, 2002, p. 1). They agree that all children have the right to a high quality education, that the primary role of a school is to create opportunities for all children to reach their “educational goals”, and that “deep learning” occurs collaboratively, not competitively (Hymer & Michel, 2002, p. 3).

In Australia, developments in educational provisions for gifted and talented students have been perceived to be relatively successful. In 2001 the Senate Select Committee identified

the need for specialist education for gifted and talented students, listing underachievement, boredom, frustration and psychological distress as possible consequences for gifted children whose educational needs were not supported (Senate Select Committee, 2001). The report also mentions anti-elitism and misconceptions about giftedness as reasons for problems in gifted education, including statements such as “high intelligence has a connotation of general superiority which arouses resentment” (Senate Select Committee, 2001, p.31) and “children experiencing learning difficulties, low socio-economic conditions or low literacy levels, could not be gifted” (Senate Select Committee, 2001, p 33).

The New South Wales Department of Education and Training *Policy and Implementation Strategies for the Education of Gifted and Talented Students* (2004) supports the notion that gifted and talented students require differentiated and enriched programs in order to develop their gifts into talents. The policy states:

Gifted and Talented students are found in all communities, regardless of their ethnic, cultural or socio-economic backgrounds. The gifted population includes students who are underachieving and who have disabilities. It is imperative that school communities develop effective, equitable and defensible identification programs that avoid cultural bias and provide developmentally appropriate programs for gifted and talented students (p.7).

Thus, it is the aim of the New South Wales public education system to ensure gifted and talented students are identified and nurtured, regardless of their backgrounds or physical inhibitions.

Similarly, Gross (1994) states that “intellectually and academically gifted children in Australian society face, at best, apathy, at worst, a compulsive hostility and resentment” (Gross, 1994, p.2) She argues that “it is simplistic but very tempting to...label any educational provision aimed at enhancing the gifted student’s chances of succeeding academically as ‘elitist’” (Gross, 1994, p. 2). Gross (1994) presents arguments both for and

against the ability grouping of gifted students in environments such as Opportunity “C” classes and academically selective high schools. She summarises Van Tassel-Baska’s (1994) statement that the “arguments against ability grouping “arise from community perceptions, and are not supported by educational research” but that arguments which support ability grouping are “based on educational and psychological grounds and stem from an appreciation of the intellectual and emotional needs of gifted children” (Gross, 2000, p. 4). In terms of Opportunity “C” classes, Gross (2000) states that “many educators and psychologists working in the field of gifted education consider this to be the most appropriate and effective method of catering for gifted students in primary schools” (p. 12). Consequently, teachers in academically selective classrooms have a responsibility to provide a quality education that caters specifically to the learning needs of gifted students.

Feldhusen (in Van Tassel-Baska, 1994) states that “gifted and talented youth have special needs that call for differentiated strategies or methods of teaching” and suggests the need for “interaction with intellectual peers and independent study experiences” (Feldhusen, 1994, in Van Tassel-Baska, 1994, p. 366). He presents a list of strategies that enhance the learning experiences of gifted and talented youth. These include assessment, individualisation, high expectations, challenge, conceptual complexity, mentors, generative learning or constructivism, and metacognition (Feldhusen, 1994, in Van Tassel-Baska, 1994, pp. 368-371). In order to teach gifted children effectively, teachers must understand the ways in which people learn and construct knowledge, and employ teaching practice that is appropriate for gifted learners. This validates the educational contexts of Selective High Schools and Opportunity Classes, as they are specifically designed to cater for gifted and talented learners in this way.

Philosophies of Quality Music Education

In the National Review of School Music Education (Pascoe et al 2005), the current state of music education in Australian schools and the implications of this for educators were investigated. In the report, it was stated:

The quality of music education depends upon the quality of teaching, in partnership with quality support...Music-specific professional development is urgently required for generalist classroom teachers currently in schools. Music teachers currently in schools need greater assistance through curriculum support materials, advisory services, networks, mentoring and professional development (p.vi).

This statement outlines the need for support for music education within school communities. Without adequate support, funding, and teacher training standards, it is difficult for school communities to provide quality music teaching and learning experiences for their students.

In terms of defining a quality music program, the Music Review found a distinction between approaches to music pedagogy which focused on performance quality, and approaches which focused on teaching for understanding. The report states:

These different perspectives are not nor should be mutually exclusive...participation, enjoyment and engagement are necessary for students to reach the high end of this spectrum of quality. Effective music education begins with participation and enjoyment and moves through extension to expertise (pp.79-80).

This statement refers to a philosophy of music education that emphasises the importance of learning through musical experience. In order for students to achieve musical understanding and create quality performances, they must also be exposed to engaging and practical learning activities.

In support of this philosophy, Wiggins (2001) discusses teaching conceptually for musical understanding. She states:

One's concepts of music are constructed through experience with music. Music experts (e.g., Hargreaves, Sloboda, Swanwick) recognise that the only ways of experiencing music are through performing, listening, and creating. These are the processes of music. These are the individual's means of interacting with music (p.26).

Thus, Wiggins encourages the teaching of musical concepts and terminology through practical and interactive lessons, because "as learners participate in these processes, their schemas of understanding of musical ideas become richer, denser, and more interconnected" (2001, p.27).

Sloboda (2005) also endorses the inclusion of a variety of teaching and learning activities in music programs. He states

...the most common way by which young people come to increase their degree of cognitive involvement with music is by starting to perform it, through singing, or by learning a musical instrument. Such involvement forces cognitive engagement in a way that mere exposure may not (p.267)

This idea is represented in the New South Wales Board of Studies Music Syllabuses for Stages One to Six, which is significant for this study as it represents the guidelines by which music should be taught in New South Wales schools. For Opportunity Classes, the *Creative Arts K-6 Syllabus* describes Performing, Organising Sound, and Listening as the key learning areas in music, and states that "learning about musical concepts and learning to manipulate musical concepts are aspects of musical learning that should be present in all learning experiences" (Board of Studies, New South Wales, 2000, pp.66-67)

Building on this, the *Music Years 7-10 Syllabus* (Board of Studies, New South Wales, 2003) aims to:

provide students with the opportunity to acquire the knowledge, understanding and skills necessary for active engagement and enjoyment in performing, composing and listening, and to allow a range of music to have a continuing role in their lives (p.10).

These statements hold implications for all music educators, and particularly those who teach in academically selective contexts, as they have a responsibility to construct engaging and meaningful music teaching and learning experiences for their students. Whilst there are many ways in which music can be taught creatively and effectively, it is these philosophies that provide the framework for music education programs in New South Wales schools, making these philosophies relevant to this study.

Music Education for Gifted and Talented Students

For the purpose of this study a distinction must be drawn between the teaching of music to gifted and talented students, and the teaching of *musically* gifted and talented students. Much literature regarding the teaching of musically gifted students exists in the field of educational research. However, there is no significant body of research dedicated to the musical education of students who have been identified as cognitively gifted and talented, and this research issue is the basis of this study.

The connection between music education and the education of academically gifted and talented students is explored by Atterbury (1990), as part of an examination of the issues involved in catering for exceptional learners in mainstream music education. In terms of gifted and talented students who have not developed specific music talents, Atterbury (1990) states:

Not all gifted and talented students are performers. Music educators must find ways of meeting the needs of those students whose cognitive processes are substantially different from those of their peers...Goals and objectives for these learners should be constructed to include more complex cognitive processes; that is, analysis, synthesis, and evaluation should be emphasized rather than an extra accumulation of facts (p. 69).

This statement supports the argument that academically gifted and talented students require music teaching and learning experiences that cater for their specific educational

needs. Music teachers in academically selective high schools and Opportunity Class teachers are responsible for providing cognitively challenging and enriched music programs for their students.

In terms of bringing music to the primary school classroom, and particularly Opportunity Classes, the issue of the generalist teacher's musical competence is significant. Bartel, Cameron and Wiggins (2004) discuss the "self-efficacy of generalist teachers who teach music and the contribution of prior experience and education to their work" (p. 85). They examine the connections between self-efficacy and competence (p.86) and conclude that "systems that rely on non-musicians as teachers of music are expecting the impossible" (p.89). This issue is connected with the need to provide academically gifted and talented students with complex, conceptual and high-level cognitive learning activities, as teachers need to have a sound knowledge of musical concepts in order to teach them effectively.

In the National Review of School Music Education (2005), Temmerman (1991) is quoted, stating that:

The adequacy of primary classroom teachers in terms of requisite knowledge, skills and confidence as well as attitude to translate curriculum document statements into practice is a critical process that directly impacts on the quality of school music education (2005, p. 11).

It is stated within the Review that arts education in primary schools should be "holistic and general", and should provide "access for all students through integrating the arts into the general curriculum and making them relevant to life experiences" (Pascoe et al 2005, p. 13).

The Review also addresses the issue of pre-service training in music education, stating that:

Hours for pre-service teacher education for music have contracted radically in the last ten years and do not adequately prepare generalist primary teachers for teaching music in schools. Urgent action is needed to address this problem (p.vi).

Teachers in academically selective environments need to be able to teach music confidently and creatively, in order to provide their students with complex and significant music learning experiences.

Conclusion

This literature review will form the basis for further research into the education of gifted and talented students. Concepts for inclusion in future research may be the appreciation of music in the academically selective classroom, and the support of school communities in both musical and gifted education. Also, future research will seek to find connections between existing concepts of music education and the education of gifted and talented students. Ideally, these connections will support an investigation into the quality and effectiveness of current music programs, from the perspective of the students and teachers involved.

CHAPTER THREE

METHODOLOGY

Qualitative Paradigms

Qualitative research represents the distinctiveness of the social world from the world of the natural sciences, and the “implications of this for how it should be studied” (Hammersley & Atkinson, 1995, p. 2). Rather than collecting numerical and statistical data, the qualitative researcher aims to discover and interpret the ideas, perspectives and experiences of those participating in the study. This research study has been based on the perspectives of teachers and students concerning the quality of their music teaching and learning experiences, and was ethnographic in nature. Hammersley and Atkinson (1995) believe that “in many respects ethnography is the most basic form of social research” and that the role of the ethnographer is to collect “whatever data are available to throw light on the issues that are the focus of the research” (pp. 1-2). In terms of this study, the role of the ethnographic researcher has been to observe and discover the experiences of the participants, and to analyse and represent their ideas and perspectives in line with the research questions.

The research process for this study bore many of the characteristics of qualitative research as outlined by Bresler (1992). The research was holistic in that it was case-oriented and represented the “bounded system” of teachers and students in an academically selective classroom. It was also empirical in that it was field-oriented, the data were collected on school premises, and the researcher was “concerned with context”, namely academically selective educational environments (Bresler, 1992, p. 68). The study was descriptive as the written results contain quotations from interviews and questionnaires to substantiate the findings. It was also interpretive as specific criteria from the literature were used to code and evaluate the questionnaires and recorded interviews. In discovering teachers’ and students’ perspectives the study was empathic and focused on the participant.

This study has been based in what Strauss and Corbin (1998) call “grounded theory”. Rather than using the research to test an existing theory, conclusions were “derived from data, systematically gathered and analysed through the research process” (Strauss & Corbin, 1998, p. 12). The grounded theory approach was appropriate for this study, as “grounded theories, because they are drawn from data, are likely to offer insight, enhance understanding, and provide a meaningful guide to action” (Strauss & Corbin, 1998, p.12).

Finally, this study employed triangulation to improve the internal validity of the interpretations and coding of the collected data. Triangulation is defined as “the use of two or more methods of data collection in the study of some aspect of human behaviour” (Burns, 2000, p. 419). In this study, interviews, questionnaires and the audio-visual recording of classroom lessons for observation were used to assess the quality and effectiveness of music teaching and learning experiences in academically selective classrooms. The questionnaires provided background information concerning the teachers’ attitudes and knowledge of gifted and talented education, and music education. Also, the students’ opinions of their current programs, the extent to which they felt challenged and engaged, and their suggestions for improvements to the programs were drawn from the interviews. The interviews were designed to draw more detailed responses from the teachers concerning their role as music educators in academically selective contexts, and to allow targeted groups of students to expand on the information they have provided in their questionnaires. Finally, a video observation of one class for each teacher was recorded, to be used if the information given by the teacher and students of a particular class contrasted drastically.

Case Study Design

This research project was designed as an observational multi-case study. As stated by Burns (2000), observational case studies “often focus on a classroom, group, teacher or pupil, often using a variety of observation and interview methods as their major tools” (p. 461). In this study, teachers and students in particular educational contexts were at the core of the research, and interviews, questionnaires and non-participant observations were the primary methods of data collection. In this multi-case study, it was intended that each case would either produce contrasting results “for predictable reasons” or produce similar results (Burns, 2000 p.464). For example, if two schools had significantly different socio-economic circumstances, it could have been predicted that the issue of being under-resourced would affect the quality of the music programs in one of the schools, or that the value placed on music would affect the frequency and complexity of classroom music lessons. Contrastingly, if two schools had a similar socio-economic demographic, the results and attitudes toward music may be similar for each class that is observed.

In terms of the participants, an observational case study uses purposive, or criterion-based sampling, where a case is selected because it “serves the real purpose and objectives of the researcher of discovering, gaining insight and understanding into a particularly chosen phenomenon” (Burns, 2000, p. 465). Anderson and Burns (1989) also describe purposeful sampling as “a deliberate attempt to sample specific groups or individuals so that the sample is representative of that group or type of individual” (Anderson & Burns, 1989, p. 100). This study has used purposive sampling, as particular educational environments were at the core of the research, and participants were selected accordingly.

For this study, it was intended that the multi-case study design would allow the perspectives of more teachers and students to be included, strengthening the breadth, depth, and credibility of the findings.

Sample of Participants

Sampling for this study was purposive, and the specific academically selective classroom environments featured in this study were primary school Opportunity Classes and students undertaking the Mandatory Music Course in academically selective high schools in the Sydney Metropolitan area. The participants involved were students in such classes, and their teachers.

The sample consisted of 8 teachers, and consequently 8 classes. Four Selective High School teachers, from two different schools, and four OC teachers, two from the same school and two from different schools, were chosen for the study. These schools were selected because they represented very different demographic areas, and had no connection with one another. This was designed so that the results would represent a wide cross-section of perspectives from teachers and students with various backgrounds and experiences. Each teacher and student completed a questionnaire, and each teacher and a group of four or five students from each class were interviewed. Each interview with a teacher ran for between twenty and thirty minutes, and each group interview with the students ran for between ten and fifteen minutes. In the following table, the details of each school have been given.

School	Location	Number of Teachers Interviewed	Number of Student Surveys	Number of Students Interviewed	Dates of Interviews	Dates of Observations
Selective High School I	Bexley	2	50	6	4th May 18th May	4th May 18th May
Selective High School II	Penrith	2	19	10	29th August	22nd June
OC Class I	Mt Druitt	2	54	10	11th May 8th June	11th May 8th June
OC Class II	Picnic Point	1	26	6	25th May	25th May
OC Class III	Summer Hill	1	21	5	29th June	17th August

Table 1: Contextual Information for Schools Involved in the Study

Pre-Interview and Observation Procedures

Prior to visiting the participating schools and conducting interviews, contact was made with the schools and individual teachers in question. Letters to the principal of each school, along with participant information statements and parental consent forms, were sent to inform each school of the nature of the research and to obtain the commitment of their participation. Individual teachers were contacted via telephone, mail, fax or electronic mail, with a list of topics for the interviews and the opportunity to discuss the purpose of the research. This procedure was designed to help the participating teachers feel comfortable with the research process.

Data Collection

The main methods of data collection were questionnaires, and the recording of interviews and observed music lessons. In total, eight lesson observations, eight interviews with teachers, and eight interviews with small groups of students were conducted.

Non-participant observation involves watching what is happening and recording events as they occur (Burns, 2000, p. 413). In the case of this study, non-participant observation was used to record, and later analyse music lessons involving gifted and talented students, for the purpose of viewing their interactions with lesson material and the strategies employed by the teachers, should significant discrepancies in the information provided by the students and their teachers emerge from the data. The observation and recording of the music lessons was based on a naturalistic design, in which “the researcher interferes less with the phenomenon and attempts to answer questions by either observing or participating in the phenomenon, but not manipulating conditions antecedent to the phenomenon” (Anderson & Burns, 1989, p. 78). A naturalistic setting is appropriate for this

research project as the study was designed to examine existing music programs, and was not intended to influence classroom activities.

Questionnaires were given to each teacher and student involved in the study. These were designed to gather background information about each informant, and to provide some quantitative data for the study. The questionnaires differed from the interviews as they relied on “standardised prompts and questions” while interviews “tend to rely on less-standardised prompts and questions” (Anderson & Burns, 1989, pp. 117-118). The questionnaires allowed basic demographic data and succinct statements to be drawn from the sample.

The interview method of data collection is a hallmark of case study investigations, as it allows the ethnographer to record and quote the words and expressions of the participant. Burns (2000) states that “interviews are essential, as most case studies are about people and their activities” and that interviewees “provide important insights and identify other sources of evidence” (p.467). For these reasons, the interview method was an appropriate way of collecting data for this study, as the research questions directly involved the perspectives and insights of the participants.

For this study, semi-structured interviews were used, as the participants were informants rather than respondents (Burns, 2000, p. 467). This form of interview was used to maintain a sense of structure and to allow the retrieval of relevant information, whilst also allowing discussion and elaboration by the informant. The main strengths of the semi-structured interview are that the option to respond allows the informant “not only to express an opinion, but to explain why that opinion is held” and that consequently a “richer set of evidence is available” (Anderson & Burns, 1989, p. 120).

Analysis of Data

The main process for analysing data from the questionnaires and interviews was the coding method, which Burns (2000) describes as “classifying material into themes, issues, topics, concepts, propositions” (p. 432). Because this study was based in the grounded theory approach, the interviews were initially transcribed using open coding, “a procedure by which empirical data are conceptualized”. Through this method, concepts are analysed and compared, and the process of connecting theoretical categories is known as axial coding (Strauss & Corbin, 1997, p. 133). Because the interview data were based on a series of questions, the emergent themes from each interview and the literature were compared and connected according to the research questions. Some anticipated themes for this study were the perceived learning characteristics of gifted and talented students and the impact of these on music teaching and learning activities, current uses of music programs in classrooms, the level of support offered by school executives and the school community, and the reactions of students to the music teaching and learning experiences offered in the classroom.

The recorded observations were not analysed as primary sources of data, but were kept to be used if the interview data from a particular group of students and their teacher were significantly contrasting. In this situation, the observations would have been analysed to ascertain the quality of the music lesson, the students’ engagement in the lesson content, and the relationship between the teacher and the students within the music lesson.

All participants in this study remained anonymous, with each student questionnaire receiving a number, and each teacher questionnaire receiving a letter, for purposes of analysis. The methods of data collection used in this study were designed to draw the perspectives and experiences of the participants, rather than statistical data. The results of

the data collection process have been presented and discussed in the subsequent chapters of this study.

CHAPTER FOUR

PRESENTATION OF RESULTS

Using the coding method as described by Burns (2000), these data have been classified into “categories of phenomena” according to issues that arose during the data collection process, and from the literature. The data have been analysed and presented in order to show significant relationships between the perspectives of the teachers and students involved in the study, and the relevance of these perspectives to the Research Questions.

The two main methods of data collection for this study were questionnaire and interview. The Pre-Interview Questionnaire for the teachers (see Appendix A) was designed to gather demographic information regarding the educational backgrounds and attitudes of each participant. The Student Surveys (see Appendix B) were designed to gather quantitative figures regarding the attitudes of gifted and talented students toward their current music programs, and their ideas and preferences for improvements. The interview questions were based on the research questions, with the aim of expanding on the information provided in the student surveys, and discovering in more detail the perspectives of the teachers. Each participant was given a number for identification. Each interview has been transcribed, drawing responses that were relevant to the research questions.

Each item on the questionnaires was categorised and tabulated. The results have been graphed to show comparisons and notable trends in the data. For Categories One, Two and Three, quantitative data have been presented to show significant perspectives and preferences of the participants. For Categories Four and Five, statements by teachers have been quoted to show significant issues that arose during the interview process, and how these issues impact upon the perceived quality of music programs. The discussion chapter will present and explore the relationships between the perspectives of the teachers and the students.

Category One – Understanding the Needs of Gifted and Talented

Learners

From the literature, a list of social and learning characteristics of cognitively gifted and talented students was drawn. In the pre-interview questionnaires, teachers were given asked to identify, from this list, those characteristics they believed were evident in their students, based on their teaching experience in academically selective contexts (see *Table 2*) Teachers were also given the opportunity to nominate any other personality traits and behaviours they believed to be characteristic of gifted and talented students.

Nominated Characteristic	Frequency	Percentage of Sample
Creative Thinking	8	100
Logical Thinking	8	100
Analytical Thinking	8	100
Aptitude & Ability in the Performing Arts	7	87.5
Psychomotor Ability	5	62.5
Self Motivation	7	87.5
Persistence and Task Commitment	8	100
Leadership Ability	7	87.5
Tendencies to become frustrated or bored	7	87.5
Tendencies to befriend older students	5	62.5
Withdrawal/Anti-social behaviour	3	37.5
Precocity	7	87.5
Specific Academic Aptitudes	5	62.5

Table 2: Teacher Acknowledgement of Characteristics (n=8)

Other social and learning characteristics that were nominated by the teachers were:

- Lack of logical thinking
- Self-motivation being dampened by family pressure
- Students seeking the praise of their teacher
- Students seeking direction in tasks
- A preference to be 'different' and not conform
- Well developed public speaking skills
- Sense of humour
- Sense of justice
- Students seeking opportunities to become involved in the school and wider communities
- Willingness to be adventurous and exploratory in their approach to learning

Another facet of understanding the needs of gifted and talented students is providing opportunities for extension. In music education, this is most often manifested in the provision of co-curricular activities, and teachers were asked to state the activities that were provided for their students within their school communities (see *Table 3*)

Nominated Activity	Frequency	Percentage of Sample
Instrumental Programs	6	75
Choirs	4	50
Public Performances	3	37.5
Master class programs for solo performance	1	12.5

Table 3: Co-Curricular Provisions (n=8)

These results show that whilst a number of quality co-curricular opportunities are provided for the gifted and talented students within this study, only a small number are being exposed to public performances. This correlates with the number of students who, in Category Three, believed that public performances would be a good way to show what they had learned in music, and the number of students who felt they needed more opportunities to perform outside the classroom.

Category Two – Employing Teaching Practice Appropriate for Gifted and Talented Learners in Academically Selective Contexts

The data within this category were drawn largely from the student questionnaires, and from comments made by teachers during the interview process. This category relates to the employment of teaching practice that caters for the learning needs of cognitively gifted and talented students. It is assessed through the commitment of teachers to providing engaging, challenging and enjoyable music lessons, and the extent to which students feel they are provided with music lessons that represent quality teaching.

Students

In the questionnaires, the students were asked to quantify the extent to which they enjoyed their music lessons with a rating between one and five (five representing the most

positive answer). The percentages given are representative of a sample of 170 students (see *Figure 2*)

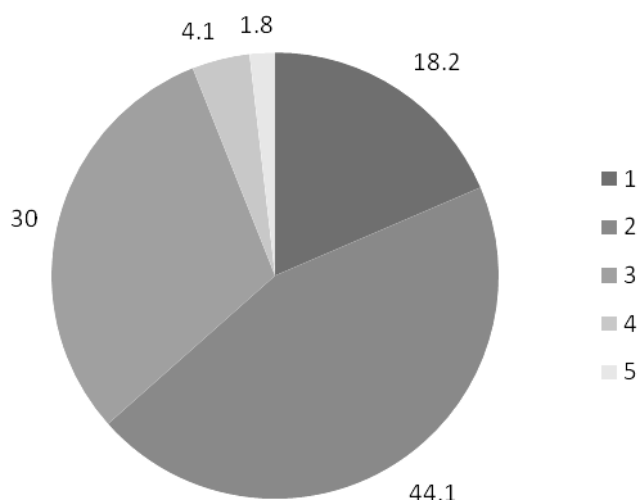


Figure 2: Enjoyment of Music Lessons (n=170)

Students were also asked to nominate the aspects of their music lessons which they found most enjoyable (see *Table 4*)

Response	Frequency	Percentage of Sample
Using computers for composition	35	20.5
Playing music on keyboard	16	9.4
Listening analytically to different styles of music	12	7.2
Experimenting with music	10	5.9
Playing a variety of instruments	42	24.7
Singing	17	10
The fact that it is a more relaxing subject	7	4.1
Group work	10	5.9
Learning new pieces to perform as a class	15	8.8
Preparing for public performance/perfecting standards	6	3.5

Table 4: Most Enjoyable Aspects of Music Lessons (n=170)

Students were also asked to quantify, with a rating of one to five, the extent to which they found their classroom music lessons challenging (see *Figure 3*). They were also asked if they were taught about the concepts of music (see *Figure 4*).

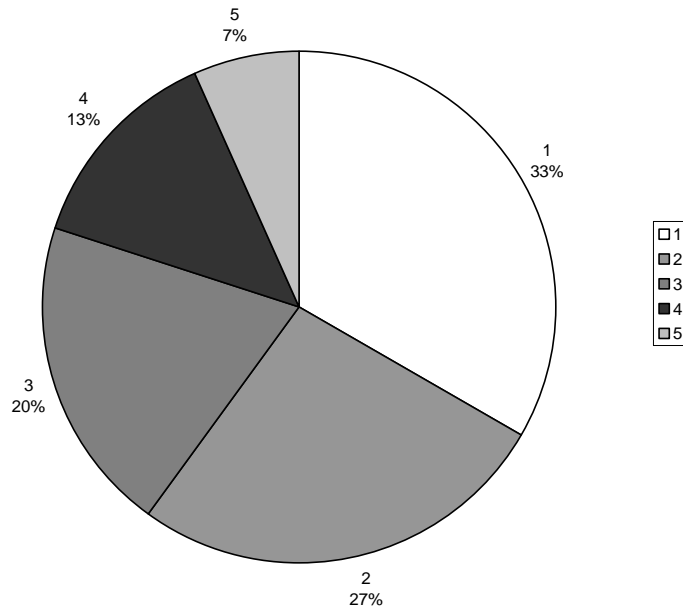


Figure 3: Challenge in Music Lessons (n=170)

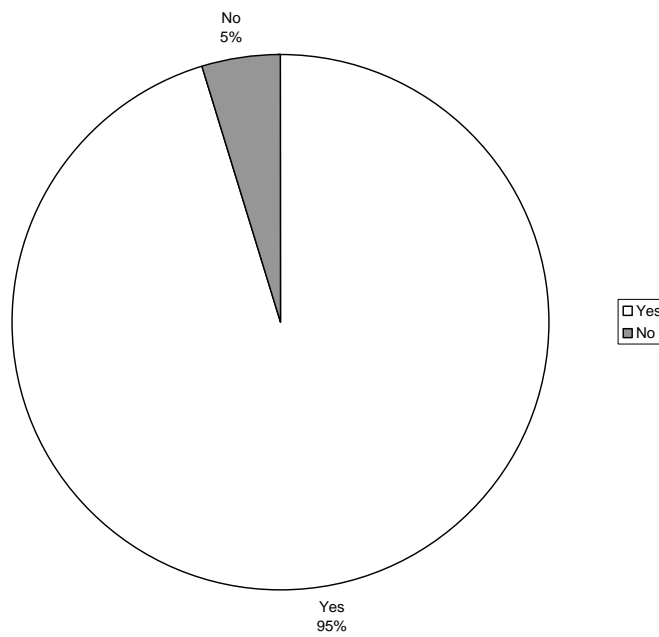


Figure 4: Evidence of Conceptual Teaching (n=170)

Students were also asked to quantify the extent to which they are taught for effective understanding of musical concepts. They were asked to state how often they understood what they were taught in their music lessons, and given options of 'always', 'usually', 'rarely', and 'never' (see Figure 5)

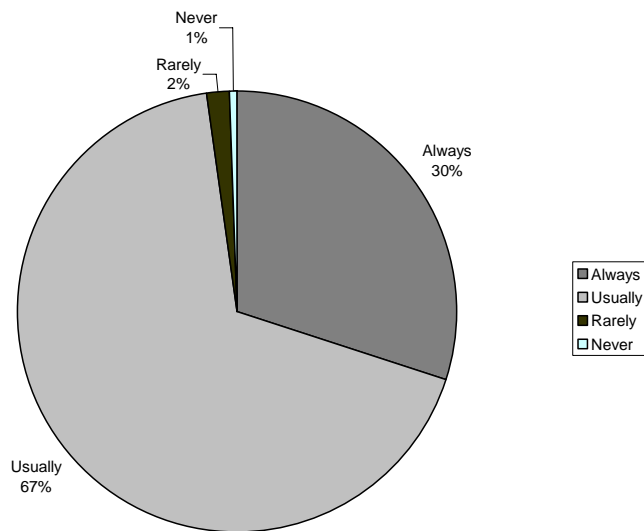


Figure 5: Understanding of Musical Concepts (n=170)

Teachers

In terms of teachers' perspectives of the employment of teaching practice appropriate to the needs of gifted and talented learners, a number of sub-categories emerged from the interview data. The results were as follows:

Composition

A number of teachers mentioned composition as an effective way to help their students explore musical concepts, either from the perspective of having used it frequently in the classroom, or acknowledging a need to use it more often.

Teacher D, a music specialist who teaches OC classes, reported:

Within every unit there is at least one composition element. The use of open-ended and creative tasks is not only a philosophy in music education, it's a necessity when teaching OC classes.

Teacher F, a Selective High School teacher, spoke of composition as a way to extend the more musically able students:

The more able students you encourage, and show them ways in which they can take the learning further, often through self-directed tasks and self-discovery, such as composition tasks

Teacher G also reported that composition was an excellent way for more able students to extend their learning experiences and utilise their creativity:

Last term I set a task to compose a melody based on a pentatonic scale. One boy came back a few days later, and showed me his piece that he had written for an 8-instrument ensemble.

Teacher C, an OC teacher and Assistant Principal, reported her desire to implement more creative work into her music programs:

Next term I'd like to put together a band so the students can all use their skills, and perhaps create a musical.

However, Teacher C also reported the issues of a lack of time:

Often I plan things like this and don't get around to them.

This represents the issue of time and resource constraints on teachers, which affect the quality of their programs, and this issue will be discussed further in the following chapter.

Importance of performance opportunities and a practical outcome

This issue was most-often mentioned by OC teachers, because high school teachers feel their advanced co-curricular ensembles cater for the needs of their students in this area, and because performance assessments are required to be conducted within the framework of the NSW Secondary Music Syllabus.

Teacher D stated:

I might give them sheet work with rhythm and melody dictations, but I tend to base a lot of that around performance work.

Teacher B described the importance of practical activity and performance opportunities as important because practical outcomes encourage a greater sense of motivation and creativity amongst students:

Without an outlet for performance, learning music is pointless. It becomes academic and you can't share it with anyone. Once I give them the skills, we have a performing arts night, where they get to work in groups and compose music and develop dramatic items of their own. When we work towards a performance it encourages them and gives them focus – the focus of a performance engages the kids.

In agreement with this statement, Teacher A, who works in partnership with Teacher B, stated that practical activities were important for OC students:

The experience needs to be real. If there isn't a practical outcome, their first question is "why are we doing it?"

Integration of theoretical and practical activities

The literature has shown that integrating composition, aural, performance and theoretical content in music lessons is an example of effective music teaching practice (Sloboda, 2005; NSW Board of Studies, 2003) . The integration of content is also pertinent in the teaching of gifted and talented students, as it ensures deeper understanding of musical concepts.

During the interview process, the concept of content integration was most often discussed by high school teachers, due to their extended training in music pedagogy, compared with that of primary school teachers. However, one of the OC teachers commented on the benefits of integrating lesson content in terms of musical understanding and task application.

When describing the content of a typical lesson with his OC students, Teacher A states:

In one lesson they can go from listening to a song and then playing it, and discussing how it fits together, to devising their own ideas for composition. When an [theoretical] issue comes up, we go through the theory to show how it affects what they're playing, so it's very closely linked with a practical outcome.

Teacher A relates this directly to the nature of these students, stating:

The music lessons that I do with these kids would not be appropriate for kids that aren't cognitively gifted the way they are. They wouldn't be able to handle the pace or the depth.

Teacher F, a high school music teacher, states:

I try not to draw lines between theory and practical, it's got to be an integrated process. In one lesson you should incorporate listening, composing and performing to support the learning of musical concepts through a variety of activities.

Teacher E, from the same school, states:

I think that another push in education at the moment is the idea of authentic, enriched tasks. I find in music if you're getting them to compose, to perform, and to

work musicologically with analysis and listen to stimulating music, then the programs will work.

Teachers G and H, who work in the same high school, collaborate closely in order to provide their students with integrated lessons that cover both theoretical and practical activities.

Teacher G states:

I think we have a great balance here. Where in one room we might be listening to reggae music, for example, analysing it, and reading from the score, the class in the next room will be performing music in the same style. There's always a relationship between practical and theory.

Group Work

Group work is often encouraged in music teaching and learning, as it allows students to develop ensemble skills and utilise their creativity. Three teachers reported the use of group work in their classes as a method that was particularly effective with gifted and talented students.

Teacher D, a primary music specialist, stated:

A lot of the OC students are terrible with group work, by nature of their independence and some anti-social tendencies. I try to nurture group and pair work in the classroom to assist with this, but a lot of them prefer to work on their own.

Teacher F reported group work as a means of utilising resources and integration of content within a lesson:

We generally split into two groups, and do varied activities. Provided you have the facilities and the space, this works well for these kids.

The use of group work in music, however, is important as it allows students to build skills in team work, and focus less on academic competition. Teacher E reported:

One of the major themes in this school over the last 6-10 years has been to get kids to compete with themselves and co-operate with others, rather than worrying about what other kids are achieving.

This relates to the nature of academically selective contexts, and the role and value of music education for gifted and talented students, as will be discussed in the next chapter.

Category Three – Issues Affecting Teacher Effectiveness and Program

Quality

Students

In the questionnaires, students were asked whether or not they feel in-class performances, school concerts, and public performances are an effective way to demonstrate their musical skills and knowledge (see *Figure 6*).

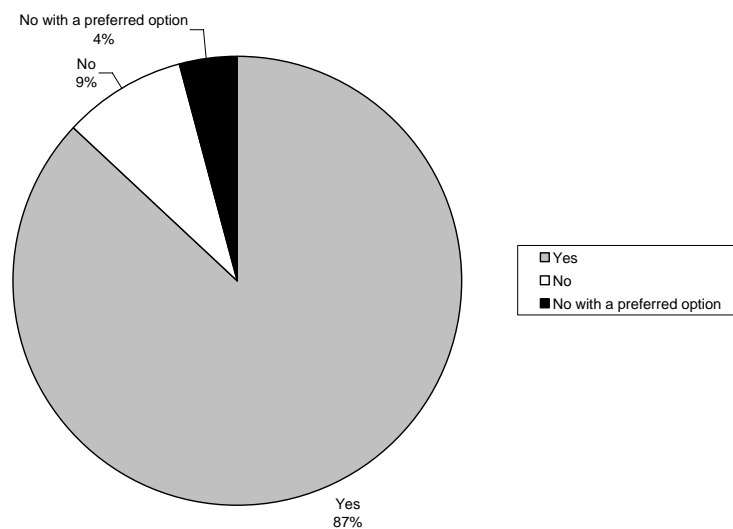


Figure 6: Performance as an effective means of showing what students have learned (n=170)

Students also nominated other ways in which they would like to be able to show what they had learned:

Option	Frequency	Percentage of Sample
Authentic Performance (playing specific styles of music on the instruments they were designed for)	3	1.8
Use of Technology (computer-notated composition, web pages, recording)	7	4.1
Play their own compositions to an audience	2	1.2
Play pieces learned in class to an audience	26	15.3
Class tests	7	4.1
Individual performance with teacher feedback	4	2.4
Playing advanced (external lessons) repertoire to an audience	6	3.5
Group performances in class	3	1.8
None	112	65.9

Table 5: Student Preference for Modes of Assessment (n=170)

Students were also asked to nominate improvements that could be made to their existing classroom music programs (see *Table 6*).

Suggestion	Frequency	Percentage of Sample
Listen to more musical genres	6	3.5
More composition tasks	45	26.5
More practical activities	70	41.1
More group work	9	5.3
Singing	20	11.8
Greater depth and pace	20	11.8

Table 6: Suggestions for Improvement to Programs

Teachers

Teacher training in music education is a defining factor in the quality and effectiveness of music programs (Bartel, Cameron, Wiggins & Wiggins, 2004; Pascoe et al, 2005). Of the eight teachers involved in the study, five had been trained in music education at a tertiary level. Of those five, four were high school teachers and the fifth worked as a music

specialist in a primary school. The remaining three teachers, who had been trained as primary classroom teachers, reported their music training to consist of basic skills in piano, guitar and recorder, and basic concepts of music theory.

In terms of teacher-training in Gifted and Talented education, the following results were reported:

Area of Training	Frequency	Percentage of Sample
Post Graduate Degree	1	12.5
In-service (annual)	4	50
Conferences (annual)	2	25
OC/Selective High School Network Meetings	1	12.5

Table 7: Teacher Training in Gifted and Talented Education (n=8)

The extent to which teacher training, in these two areas affects the quality of music programs for gifted and talented students will be discussed in the following chapter.

Three teachers reported the impact of high levels of expectation from the school community and the parents of their students as an issue which affected the quality of their music programs. For example, Teacher H reported that:

You have extremely high expectations placed on you by the school community. The downside is that you are often expected to walk on water.

Teacher C, an OC teacher, reported the direct impact that the attitudes of her students' parents has on her ability to teach music effectively in the classroom:

If I were to do a program of music that took several lessons throughout the week, I think the parents would be questioning that. If one child went home and said they hadn't done maths that day because we had spent the morning on music, the next day the parents would be at the door asking why their child had been learning music and not maths. They don't mind if their children learn music and are good at it, but only if everything else is done.

From a different perspective, the sense of academic pressure placed on gifted and talented children by their parents was also reported to affect the students' attitudes toward learning music. For example, Teacher D reported the issue of academic pressure detracting from her students' enjoyment of music, as many students are pushed to achieve high levels of performance on their instrument at an early age. She stated:

I feel there are a lot of kids who are under academic pressure from home. They're less likely to be the ones who are dedicated to the school ensembles and performances...their passion is often lacking.

Similarly, Teacher A reported:

I find that a lot of the kids who have music lessons outside of school are being forced by their parents, and they're the kids who don't want to do music in the classroom...they have the ability, but don't have the desire to play, and it's really hard to get that out of them. You ask a theoretical question and they've got the answer, but quite often they'll hide their talent, they won't perform on the instrument they're good at, and just hide in the background.

Teacher B, who works as an OC teacher in the same school as Teacher A, also reported this issue from the perspective of trying to encourage students to utilise their skills and enjoy music:

I know there are kids in this class who know a lot more about music theory than I do. They have skills that I don't have, but we can use and nurture them in the classroom. A lot of parents come to me and say "I'm so glad my child loves playing the piano again".

Teachers A, B, C, D and H also reported the issue of the cultural backgrounds of their students, and how this affects the students' attitudes toward learning music. For example, Teacher H spoke of the musical backgrounds that a lot of her students have, and how this relates to the level of knowledge and skill they bring to the classroom:

At a comprehensive high school you would find the majority of kids would come to you with nothing. Whereas here, you start with the knowledge that they know something and you set the tasks at a higher level.

Teacher H also reported the level of ethnicity within her school, and how the various cultural influences the students have had affects their ability to learn western music:

Teaching these kids about western tonality is like starting from scratch, even though they may be accomplished musicians in the music of another culture. A lot of kids, particularly boys, who have never been introduced to western music really struggle with the work.

Teacher A reported a similar issue, which relates directly to the geographical location of the school and the associated socio-economic demographic of the students:

A lot of these students are coming to the class with no musical background. You're working with impoverished backgrounds to start with, and most of our kids have never seen an orchestral instrument, let alone heard one played.

These statements are significant as they report evidence of an attitude amongst parents of academically gifted children which results in these children being placed under immense pressure to succeed. In terms of music lessons, this issue is particularly significant, as being pushed into private lessons can cause such students to associate this pressure with the learning of music.

Category Four – Linking Teaching Practice with Student Achievement

Each of the teachers were asked during the interview process how they measured their students' levels of engagement during their music lessons, how they assessed their achievements, and the extent to which they felt their students' achievements in music equated to their cognitive potential.

In terms of engagement, six of the eight teachers reported that observation of student behaviour was their primary means of measuring the effectiveness of lesson content.

Teacher A reported:

You can judge their level of involvement, that's just obvious in the lesson. Then you have the other extreme of the kids you have to put the handbrake on because their ideas are flowing so quickly.

Teacher B reported that music was not formally assessed in her OC classroom:

You can see the kids that think musically and problem solve. But it's more observation than a formal test.

Similarly, Teacher C stated:

A lot of it is by observation. For example, if the students hand in their percussion scores at the end of a lesson, and one has 8 bars completed and nicely explained, and another has just finished one bar, then you have to keep an eye out for that student. Our assessment on their reports is very small for music, based mainly on participation.

Teacher D, a Music Specialist who teaches OC classes, reported:

Trying to actively gauge their understanding and appreciation is pretty difficult...basically, I observe their class activities, how successfully they complete those tasks and their involvement in class discussions.

In reference to observing student engagement, Teacher E, a Selective High School teacher, reported:

That is just the professionalism you should apply as a teacher... I think for most people it's fairly obvious when you're getting all the usual visual signs that the kids are not engaged and are bored, and like all teachers you see those signs from time to time and try to put a stop to them.

Similarly, Teacher F stated:

You do your best to be aware of their understanding of the concepts you're teaching, by being closely involved in their compositional activities and encouraging discussion.

In terms of dealing with the different levels of ability with the classroom, he reported:

It is difficult to respond to that, however you just do your best to give them extension activities, and to keep them engaged, and to keep them focused on the core part of the work and getting them to be more exploratory in the way they approach tasks.

The role of assessment in the construction of a quality music program will be discussed in the following chapter.

Category Five – The Role and Value of Music Education for

Academically Gifted and Talented Students

Each teacher was asked to quantify, by rating between 1 and 5, how much they value music as part of a quality all-round education, and all of the teachers gave the highest rating of 5.

From the interviews with the teachers, the data in this category revealed two significant trends in the perceptions the teachers have of the roles and value of music education for gifted and talented learners.

Music as a 'leveller'

Three teachers, all of whom were primary school teachers, reported their belief that music is an excellent way of bringing students with various academic strengths to an equal level and assisting their social adjustment to an academically selective environment.

Teacher D reported:

I personally think music is very levelling. Even a child who is good at piano, for example, there are activities such as learning a new instrument or using improvisation, that they will find challenging.

Similarly, Teacher B reported her use of music as a leveller in her OC class:

We play music every morning, and I think it sets the tone for the day. It's a leveller, and it gives a sense of togetherness. There is a lot of competition in this classroom, but music puts everyone on a level playing field.

Teacher A, who works in the same school, reported the same use of music to bring students together in a less competitive environment:

We use recorder as a task that they have in common, but haven't yet mastered. Because the gifted kids, at the start of a year 5 OC are all concerned about how their abilities will compare with the other students in their class. So by doing that, we bring them all back to a level playing field. They learn to have fun with each other. We actually use music as a way of helping their social adjustment to OC.

Fun, Motivation and Challenge

In terms of this role for music education in academically selective contexts, Teacher C reported:

Sometimes I think that even though these kids are gifted and learn music outside school, they may have missed out on fun things like singing, playing rhythm games, and playing with their classmates.

Similarly, Teacher D reported:

I think they're [OC students] motivated, and they like a challenge. I haven't had any kids in those classes that have made a point of not enjoying music.

Teacher B stated:

My aim is to keep them engaged, and to help them love music. I think they do love music, and that's huge. I think music affects other cognitive areas too – it is problem solving.

Teacher A, from the same school, reported:

[Music] gives them a chance to use that creativity that they have, and a chance for them to challenge themselves at levels that they hadn't previously. When we perform in festivals, you just see the students holding their heads high. To come from the backgrounds that a lot of them do, and then create a performance that is quality, is very impressive.

Teacher F, a Selective High School teacher, stated:

We certainly do our best to encourage positive attitudes, and interest and value in what they're doing. And it's interesting to give so-called 'non-musicians' the experiences and opportunities to do new and different things they would never have done before, and therefore say "well that's interesting, that's worthwhile, that's fun". I think when kids finish their mandatory music course in year 8, they've been stretched in terms of their understanding, and of their knowledge of what exists in this world of music.

Hence, the results in these five categories represent significant attitudes, amongst teachers and students in academically selective educational contexts, which relate directly to the connection between a quality music education and a quality education for gifted and talented students. These connections, and connections with the literature, will be discussed in the following chapter.

CHAPTER FIVE

DISCUSSION AND CONCLUSIONS

Discussion

From the data presented in the previous chapter, a number of significant trends emerged in relation to the research questions for this study. Because this research project was qualitative in nature, the results have presented the perspectives and experiences of the participants involved with the aim of increasing awareness of this particular field of educational research. It is important to note that this study has examined the teaching of music to academically gifted and talented students; it has not investigated this field in comparison to the education of these students in other key learning areas.

The themes that emerged from the data analysis process not only answered the research questions for this study, but revealed a number of areas for future research. In this chapter, the findings have been discussed in terms of the research questions and the literature, and implications for further research have been made.

Research Question A

How have teachers constructed their music programs to ensure the engagement and achievement of their academically gifted and talented students?

One of the key factors in providing quality educational programs for academically gifted and talented students is an awareness of their learning needs and social characteristics. Significantly, all of the teachers involved in the study acknowledged particular behaviours and personality traits, drawn from the literature (Clark, 1983; Betts & Neihart, 1988; Treffinger, 1991; Gross, 2000), as being characteristic of their students in academically selective contexts. As the results have shown, all of the teachers found evidence of creative, logical and analytical thinking, persistence, and task commitment in their students’

approaches to learning. These results are significant in the specific field of music education, as each of these characteristics can be nurtured and utilised in the teaching and learning of music. Whilst not all cognitively gifted and talented students have developed skills in musical performance (Atterbury, 1990), their ability to think creatively and analytically, and approach tasks with persistence, means that student in academically selective contexts are capable of engaging in music teaching and learning experiences at advanced levels. In support of this, Teacher D reported:

When you have a musical activity that requires a more logical approach, involving notation for example, you tend to find the kids in the OC class are much better at approaching them.

It is also acknowledged, however, that not all cognitively gifted and talented students will adapt to the teaching and learning of music with ease. For example, Teacher G, who works in a Selective High School, stated:

Some kids here, even though it is a Selective School, can only master basic musical tasks and can find music very difficult.

Similarly, Teacher A, an OC teacher, stated:

In an ideal world you could get all your students motivated in music, but the practicalities are that you will have those who tolerate it, and learn what they need to, but it's very difficult to inspire them further than that. What motivates them are the performances we do, because then there is a practical outcome.

These statements acknowledge that not all academically gifted and talented students will develop talents or interests in the subject of music. However, the results in the previous chapter also showed that students are more motivated by practical activities such learning to play instruments, composing music, and performing for an audience. These findings are in agreement with the literature regarding philosophies of quality music education (Wiggins, 2001; Sloboda, 2005), which argue that music is best learned and understood

through practical experience. Therefore, whilst not all academically gifted and talented students will develop significant musical talents, they are more likely to engage in quality music learning experiences if they are provided with practical musical activities.

These findings are particularly significant to this study, as all of the teachers who participated acknowledged the benefits of practical and creative musical activities for their academically gifted and talented students. Combined with an awareness of the learning needs and social characteristics of their students, the awareness of the teachers regarding the construction of quality music programs was a significant theme that emerged from the data. All of the teachers involved recognised the importance of providing musical experiences involving performing, listening, and composing for their students, to cater for their ability and desire to learn at advanced levels.

The study found that many of the students in academically selective contexts also learn a musical instrument through extra-curricular tuition. These students represent another area of need, in terms of co-curricular opportunities for performance that are created within the school. In the previous chapter, *Table 3* showed the types of co-curricular opportunities offered within each school, which cater for a range of interests and abilities. Each of the schools involved had at least one ensemble such as a band or a choir, with one of the primary schools offering band, orchestral and choral ensembles for their students. Both of the Selective High Schools involved had extensive instrumental programs, one offered open and auditioned choral ensemble opportunities, and both offered opportunities for students to become involved in the New South Wales Performing Arts Unit instrumental and vocal ensembles. For example, one Selective High School teacher, Teacher E, reported:

Our co-curricular program has been very large, mostly instrumental based, and that caters for 100 kids in the school, which is a fairly large proportion for co-curricular music. For those things we don't run in the school, such as choral work, we still open up opportunities for kids to pursue those, such as the Performing Arts Unit ensembles.

Similarly, Teacher D, a Music Specialist who teaches OC classes, stated:

There is absolutely a huge amount of activities here that these kids can link into if they choose.

Therefore, evidence of co-curricular provisions for academically gifted and talented students who also display musical talent and motivation to perform is significant in the schools involved in this study. These results represent another facet of the ways in which the teachers involved in the study are working to provide their students with quality, enriching music learning opportunities.

Another aspect of a quality music program is the way in which the achievement and progress of individual students are assessed. This study found that OC teachers, as primary school teachers, are only required to provide minimal reporting on each student's achievement in music, compared with larger key learning areas such as Mathematics and English. For this reason, the OC teachers involved in the study relied on observation of their students during music lessons to assess their individual progress. These teachers did, however, emphasise the importance of observation, and the ways in which they use it to measure each student's achievement and engagement in lesson content.

Because of the nature of music as a subject in the secondary school curriculum, the Selective High School teachers involved in the study have been required to assess and rank students in terms of their achievement in music. Assessment tasks in these contexts included performances, composition tasks, and musicology exams, designed to measure students' levels of ability in these three areas. The teachers involved in the study demonstrated an ambition to make these assessment tasks as challenging and appropriate as possible for their academically gifted and talented students, within the syllabus framework.

In support of this, the majority of students felt that musical performance was a good way of showing what they had learned in music. When asked to nominate other ways in which they would like to be able to show what they had learned, the majority of the students stated that they were happy with the way in which they were currently being assessed by their teachers. This is a significant and positive result, as it shows the connection between the needs of the students, and the actions of the teachers.

With these results, therefore, it is acknowledged that the teachers involved in this study have constructed their music programs with an awareness of both the educational needs of their students, and the nature of quality music teaching and learning experiences. The issues that have affected the actual quality of these programs have been discussed later in this chapter.

Research Question B

To what extent do academically gifted and talented students feel engaged and challenged by their school music programs?

The most significant result in response to this research question was the way in which students reported lower levels of challenge than levels of enjoyment in their music lessons. These data reported that whilst the students involved in the study rated their enjoyment of their music lessons in the higher end of the scale, the majority of students felt that the level of challenge in their music lessons was only moderate. Whilst these perspectives were quantified in the student survey, the interview data supported the fact that many academically gifted and talented students do not find their classroom music lessons significantly challenging. For example, a group of OC students who were interviewed reported this perspective of their classroom music lessons:

“Because we learn pretty fast music is not very hard. Once we’ve learned the notes it’s easy. At the moment music is more of a fun, relaxing subject.”

Similarly, a group of OC students from a different school discussed their classroom music lessons and stated:

They’re not really boring, but they’re not challenging.

The teacher of these students had admitted that her skills and knowledge in teaching music were limited, and believed that her music lessons could be more challenging for the students with the help of a mentor who could plan and implement music programs of greater quality.

The results have shown that the majority of students found practical activities, such as learning different instruments and composing music, the most enjoyable aspects of their music lessons. Similarly, when asked to nominate ways in which their music programs could be improved, the majority of students stated that more practical activities involving instruments, and more composition tasks, would enhance their enjoyment of their music programs. The study found no difference between the preferences of primary and secondary students; the nominations for each of the categories were distributed evenly amongst the two age brackets.

Therefore, a connection has been established between the perspectives of teachers and students regarding the construction of quality music programs. This study has found that because the teachers involved were aware of the needs and tastes of their academically gifted and talented students, they have generally been able to use their knowledge and skills in music to create positive and meaningful learning experiences.

The issue of the level of challenge perceived by the students in their music lessons arises from the nature of cognitively advanced students in academically selective contexts. The

literature has shown that these students have the ability to learn new concepts quickly and absorb and remember large amounts of information (Clark, 1983; Betts & Neihart, 1988; Treffinger, 1991; Gross, 2000). For this reason, it is more difficult for teachers to create music teaching and learning experiences that are significantly challenging for their students.

This is supported by Teacher G, who reported:

You work ten times harder [in a Selective High School] than in a comprehensive school because the kids get through so much work at a faster pace and need a deeper level of engagement a lot of the time.

Similarly, Teacher H who teaches in the same high school, reported:

You get to do what you were trained to do at university, and that is teach music analytically and through performance. You can get to a depth of understanding and a level of performance that often you can't achieve in other schools.

The fact that the students involved in the study reported lower levels of challenge than levels of engagement supports the argument that academically gifted and talented students do have particular learning needs and require enriched educational programs to challenge and engage them (Gross, 1999; Feldhusen, 1994, in Van Tassel-Baska, 1994). This finding validates the prospect of further research into the area of differentiating the music curriculum for academically gifted and talented students, with the aim of developing greater levels of challenge in the subject area.

Research Question C

What are the issues affecting the quality of music programs in these contexts, and what improvements can be made?

From the perspectives of the students involved in the study, the results showed that issues of performance opportunities and assessment strategies were the most significant factors

influencing perceptions of quality. These findings are connected with the common desire for practical musical activities, and they show that the engagement and achievement of students in the content of a music program is directly linked to its pedagogical quality.

Predictably, the teachers involved in the study had greater insight into the issues affecting the quality of their music programs than the students. As was shown in the previous chapter, the study found issues of teacher training, parental influence, time and resource constraints, and the cultural backgrounds of the students to be significant in response to this research question.

This study has found that teacher-training in music education had a more significant impact on the teachers' abilities to conduct successful music programs, than their training in gifted and talented education. All of the teachers involved had received equitable amounts of training in gifted and talented education and had worked for a number of years in academically selective contexts.

The impact of teacher training on the quality of a music program is not specific to the education of gifted and talented students. As the literature has shown (Bartel, Cameron Wiggins & Wiggins, 2004; Pascoe et al., 2005), the musical training of a teacher affects their confidence and ability in constructing and executing musical activities. This study has also shown this to be true, as the two OC teachers who had received minimal music training were the least confident in their approach to teaching, and believed that their students would benefit from a mentor who had greater skills and experience in teaching music. For example, Teacher C stated that:

Having a music mentor here would definitely help. I would love that because I'm sure we could create something that would cater for all the musical abilities. That's why I welcome our substitute teacher, she loves doing music and art and dance, and I welcome her with open arms because I know these areas are my weakness, and she is able to extend them more than I am.

Similarly, Teacher B, an OC teacher at a different school, agreed that a music mentor would be an asset to her academically gifted and talented students, in terms of offering their expertise and motivating them. She stated:

It's great to have role models and mentors from the wider community who have persevered with music. Music should be valued.

These statements support the assertion that a teacher's training in music education affects their ability to teach music confidently. Whilst this issue is particular to the education of gifted and talented students, it is significant to this study because the nature of the students involved is such that they learn quickly and in great depth. If a teacher does not have knowledge and confidence in teaching music, their academically gifted and talented students will not receive the challenging and enriched programs they require.

The issue of parental influence was significant in the findings of this study. It was found that the parents of academically gifted and talented students affect their music learning programs in two main ways; through their lack of support of music as a school subject, and through the academic pressure that is placed in their children who learn musical instruments outside the school curriculum. The fact that parents of gifted and talented students do not value music as an educationally beneficial subject in the school curriculum has significant implications for the field of music education. As the Music Review (Pascoe et al., 2005) reported, parents have a role in maintaining the value and quality of music education in schools and in wider communities. Without their support, music education will continue to be undervalued as a key learning area. With particular reference to academically selective contexts, parents have a direct impact on the way music is appreciated and learned by their students, as Teacher C reported:

I think if music was cleverly integrated and I had covered all of the other learning areas that the parents would accept it, but I wouldn't get the same support that I would get if I said I was going to do a whole extra program of mathematics. There is

definitely a different attitude toward music than there is toward other academic areas.

This finding is significant to the study, as further research into the area of parental attitudes and support of music could improve the way music education is valued in academically selective contexts, and in all schools.

The impact of time and resource constraints on the quality of music programs in academically selective contexts was also found to be significant. In terms of resources, some teachers in schools from lower socio-economic areas felt that with better equipment they could enhance the music teaching and learning experiences in their classrooms. They also felt, however, that they and their students were able to make the most of the resources they had. For example, Teacher A, an OC teacher, reported:

The boundaries we have are a lack of quality instruments and a lack of facilities – we don't even have a proper hall, so we have to squeeze into the library for performances. But within the boundaries that we have, I think our programs are very effective. It would be very easy to do what a lot of OC programs do and skip music altogether, but we find it's just so good for the kids.

This lack of facilities and resources is not particular to OC classes; it affects whole schools in many areas of New South Wales. Because this issue can not be quickly or easily rectified, the significance of this finding is the way in which these OC teachers are able to use the resources they have to create quality and meaningful music learning experiences for their students. The students of Teachers A and B in particular, from two different OC classes in the same school, are provided with opportunities to perform in public festivals, and for audiences at school assemblies on special occasions such as Education Week and Presentation Day. This demonstrates the enthusiasm of these teachers in bringing music into the education of their students, despite constraints of resources and facilities.

In terms of a lack of time, teachers in Selective High schools reported the impact of limited hours per week allocated to Mandatory Music courses on their ability to effectively teach their gifted and talented students. For example, teacher E reported that with more time each week in music, his students could engage in music at more advanced levels:

If we had a greater frequency of music periods, and more exposure to the kids and greater regularity in being able to reinforce concepts and try a greater range of activities, then I'm sure that would have an impact on the outcomes we would expect at the end of Year 8 Mandatory Music.

Again, this issue is not particular to selective high schools. However, in academically selective contexts, students have the capacity to learn at a faster pace and to advanced levels, and so with more time spent in music, all students could increase their level of musical ability and enhance their level of engagement in the program content.

Finally, the cultural backgrounds of the students were reported to affect the quality of their engagement in music learning experiences. Further investigation into the ethnicity of students in academically selective contexts compared with mainstream contexts is required in order to assess the peculiarity of this issue to academically gifted and talented students. However, the teachers involved in this study felt that in many cases, students from multicultural backgrounds had difficulty learning western musical genres, despite having advanced skills in the musics of their cultures. The impact of this issue was significant to the teachers involved, however further investigation of this issue would be required before assessing its significance to this particular field of research.

Research Question D

What are the roles and values of music education for academically gifted and talented students?

The quality of a music program is affected by the way in which music is valued within a particular educational community (Pascoe et al., 2005). From the results of this study, two major roles of music education for academically gifted and talented students emerged; namely, its use as a 'leveller', and its value in challenging and motivating students in an enjoyable way.

As the teachers involved in this study reported, music is an excellent subject for levelling academically gifted and talented students who are competitive in nature and feel that they need to be successful in all areas of schooling. Music, as Teacher A reported, brings all students to an equal starting point, as even those who learn instruments outside school are required to engage in a common and new activity, such as learning the recorder or the guitar. This is significant, as the literature shows that many cognitively gifted student develop anti-social tendencies and low self esteem if they are not provided with appropriate guidance and stimulation (Betts & Neihart, 1988; Gross, 2000). Teacher A supported this concept with the statement:

For so long these kids have been used to being the best at what they do. We use music as a way of showing them that it is ok to have to work at developing a skill and not be perfect straight away. They learn that it is ok to make mistakes.

Teachers A and E also discussed the ways in which music helped the students to work together, rather than compete with one another. This was reported to be an issue in academically selective contexts, and the teacher involved in this study agreed that music allowed their students to start at an equal level, because of the variety of skills that can be learned in the subject. Because music education can provide these students with stimulating activities that encourage interaction with their peers, it has a clearly defined role in the education of gifted and talented students.

Music was also reported to provide academically gifted and talented students with fun, challenging and motivating experiences which enabled them to develop co-ordination and creative skills. As Teacher A reported, it is often characteristic of academically gifted and talented students to lack confidence and skill in practical areas such as musical performance:

We use music as a way of developing their co-ordination through the instrument, because a lot of them are very good at using their minds, but not translating that into a practical outcome apart from school work.

For this reason, music education has an important role in the development of practical skills for gifted and talented students, as it encourages the translation of cognitive information into a practical outcome.

Finally, music was reported by the teachers and students involved in the study to be a fun and motivating subject. In academically selective environments particularly, this is of great value as students are often pushed to achieve high standards in other subject areas. In support of this, Teacher C stated:

Some of these children are just pushed so hard, it seems they often come to school to have a rest. I think that even though they are gifted and may learn music outside school, they also enjoy fun things like singing and performing with their classmates.

Similarly, the results have shown that the Selective High School teachers involved in the study believe music to be a way of fostering positive attitudes and peer relationships in educational environments that tend to be highly academically competitive. This is a significant result, as it validates the nurturing of music programs within academically selective contexts because of positive social, emotional and educational impact they have on the students involved.

Conclusions and Implications for Further Research

The results of this study have shown that the teachers involved are aware of the particular learning needs and social characteristics of their academically gifted and talented students. They are also aware of the philosophies and practices concerning quality educational programs in music. This is a positive outcome for the study, as it shows that teachers working in this particular field are already actively engaged in providing the most effective music education possible for their gifted and talented students. The perspectives of the teachers and students have also demonstrated a number of important roles for music education in academically selective contexts, which validates this study and places emphasis on the need for music education to be valued in New South Wales State Schools.

The study has also shown, however, that there are a number of issues which affect the quality of music programs in academically selective contexts, and these issues carry implications for further research.

Reported to be one of the most influential factors in the way in which music education programs are supported in these contexts is the attitudes of the parents involved. This study has shown that the parents of students in academically selective contexts place more importance on success in learning areas such as Mathematics, English and Science, and do not value school music education as part of their child's general academic development. Those students who are pushed to succeed in their extra-curricular music lessons have been reported to lose motivation in the subject, and associate the learning of music with pressure and quantifiable achievement. This is an area that requires further research, to gauge more accurately the attitudes of such parents, their reasons for their opinions of school music education, and the influence they have in the development of the attitudes of their children.

Another significant issue reported to affect the quality of music programs was the constraints placed on teachers in terms of time and resources. Further research could be conducted that investigates the allocation of funding and support to music teachers in academically selective high schools, and to OC teachers within regular primary schools. This research would provide more accurate and detailed results in this area of the study, and would be closely connected with an investigation into the ways in which school communities value music in academically selective contexts.

Finally, this study has been limited to the investigation of the issues involved in music education for academically gifted and talented students. These issues have not been compared with issues involved in teaching these students in other key learning areas, or with the issues involved in teaching music in non-selective educational contexts. As an expansion on this initial investigation, these two areas require further research in order to understand the specific issues involved in the teaching of music in academically selective contexts.

REFERENCES

- Anderson, L. W. & Burns, R. (1989). *Research in classrooms: the study of teachers, teaching, and Instruction*. Oxford: Pergamon Press.
- Atterbury, B.W. (1990). *Mainstreaming exceptional learners in music*. Englewood Cliffs, New Jersey: Prentice-Hall, Inc.
- Bartel, L., Cameron, L., Wiggins, J., & Wiggins, R. (2004) Implications of generalist teachers' musical self-efficacy related to music. In P. Shand (Ed.) *Music education entering the 21st century* (pp 85 – 90). Perth, Western Australia: International Society for Music Education.
- Betts, G.T. & Neihart, M. (1988). Profiles of the gifted and talented. *Gifted Child Quarterly*, 32 (2), 248-253.
- Board of Studies, NSW (2000). *Creative Arts K-6 Syllabus*. Sydney: Board of Studies, NSW.
- Board of Studies, NSW (2003). *Music: mandatory and elective courses years 7-10 syllabus*. Sydney: Board of Studies, NSW.
- Bresler, L. (1992). Qualitative paradigms in music education research, *The Quarterly Journal of Music Teaching and Learning*, 3(1), 64-79.
- Burns, R. B., (2000). *Introduction to research methods (4th ed)*. Frenchs Forest, NSW: Pearson Education Australia.
- Clark, B. (1983). *Growing up gifted (4th ed)*. Columbus: Merrill Publishing Company.
- Cline, S., & Schwartz, D. (1999). *Diverse populations of gifted children: meeting their needs in the regular classroom and beyond*. New Jersey: Prentice Hall.

- Gagné, F. (1985) Giftedness and Talent: re-examining a re-examination of the definition, *Gifted Child Quarterly*, 29 (3), 112.
- Gagné, F. (2003) Transforming gifts into talents: the DMGT as a developmental theory. In N. Colangelo., and G. Davis (Eds.) (2003) *Handbook of Gifted Education*. Boston: Allyn and Bacon, pp. 60-68.
- Gardner, H. (2004). *Frames of mind: the theory of multiple intellegiences (20th anniversary ed)*. New York: Basic Books.
- Gross, M.U.M. (1994). *Planning defensible programs for gifted and talented students: rejecting the myths, accepting the realities*. Sydney, University of New South Wales: Gifted Education Seminar.
- Gross, M. U. M. (1999) *Inequity in equity? Gifted education in Australia*. Homebush, NSW: The Menzies Research Centre.
- Gross, M.U.M. (2000) Exceptionally gifted Students: an underserved population. *Understanding our Gifted*,12, 3-9.
- Gross, M.U.M et.al (2001) *Gifted students in secondary schools: differentiating the curriculum*. (2nd ed) Sydney: GERRIC
- Hammersley, M. & Atkinson, P. (1995). *Ethnography: principles in practice (2nd ed)*. London & New York: Routledge.
- Hymer, B. & Michel, D. (2002). *Gifted and talented learners – creating a policy for inclusion*. London: David Fulton Publishers.

- Marland, S. P. (1972) *Education of the gifted and talented: Report to the Congress of the United States by the U.S. Commission of Education*. Washington DC: U.S. Government Printing Office.
- McPherson, G. E., & Williamon, A. (2006). Giftedness and talent. In G. E. McPherson (Ed.), *The child as musician: A handbook of musical development* (pp. 239–256). Oxford: Oxford University Press.
- Newland, T. E. (1976) *The Gifted in socio-educational perspective*. New Jersey: Prentice Hall.
- New South Wales Department of Education and Training (2004). *Policy and implementation strategies for the education of gifted and talented students*. Sydney, Australia: New South Wales Department of Education and Training.
- Pascoe, R., Leong, S., MacCallum, J., Mackinley, E., Marsh, K., Smith, B. et al. (2005) *National review of school music education: augmenting the diminished*. Canberra: Australian Government, Department of Education and Training.
- Piirto, J. (1994) *Talented children and adults: their development and education*. New York: Macmillan College Publishing Company.
- Renzulli, J.S. (1979). *What makes giftedness: a re-examination of the definition of gifted and talented*. Ventura, Calif: Ventura County Superintendent of Schools Office.
- Senate Select Committee (1988). *The education of gifted and talented children*. Canberra: Australian Government Publishing Service.
- Senate Select Committee (2001). *The education of gifted children*. Canberra: Commonwealth of Australia.

- Sloboda, J. (2005). *Exploring the musical mind: cognition, emotion, ability, function*. Oxford: Oxford University Press.
- Strauss, A. and Corbin, J. (1997). *Grounded theory in practice*. California: Sage Publications, Inc.
- Strauss, A. and Corbin, J. (1998) *Basics of qualitative research: techniques and procedures for developing grounded theory (2nd ed)*. California: Sage Publications, Inc.
- Temmerman, N. 1991, The philosophical foundations of music education: the case of primary music education in Australia. *British Journal of Music Education*, no. 8, pp.149-159.
- Treffinger, D. J., (1991). *Blending gifted education with the whole school program(2nd ed)*. Cheltenham, Victoria: Hawker Brownlow Education.
- Van Tassel-Baska, J. (1994). *Comprehensive curriculum for gifted learners (2nd ed)*. Needham Heights: Massachusetts: Allyn and Bacon.
- Wiggins, J. (2001) *Teaching for musical understanding*. Boston: McGraw Hill.

APPENDIX A – PRE-INTERVIEW QUESTIONNAIRE
AS ISSUED TO TEACHERS



The University of Sydney

SYDNEY CONSERVATORIUM OF MUSIC



Pre- Interview Questionnaire

1. How many hours each week do you spend on music lessons in the classroom?

2. How much time do you spend involving your students in extra-curricular musical activities, and what are these activities?

3. On a scale of 1 to 5, how much do you value music as an important part of a well-rounded education? (5 is the highest value)

1 2 3 4 5

4. Did you receive any musical training as part of your teaching degree? **Yes/No**
Please specify:

5. Did you complete any training in Gifted and Talented education? **Yes/No**

Please specify (include in-service training, Gifted and Talented tertiary modules, conferences, post graduate degrees):

6. From your teaching experiences, which of the following do you believe to be characteristics of academically Gifted and Talented students? (Please circle or tick)

- Creative thinking
- Logical thinking
- Analytical thinking
- Aptitude and ability in the performing arts
- Psychomotor ability
- Self-motivation
- Persistence and task commitment
- Leadership ability
- Specific academic aptitudes such as mathematics or language
- Tendencies to become frustrated or bored
- Tendencies to befriend older students, with similar mental ages.
- Withdrawal and antisocial behaviour.
- Precocity

Please list any other characteristics you have observed:

7. Do you receive support from your principal and school community in the following areas?

- Extra-curricular activities such as choirs and instrumental ensembles?
- Funding for equipment such as instruments, CD's, videos and PA systems?
- Excursions to concerts and performing arts festivals, both local and state?

Thank you for your co-operation in completing this questionnaire. Your participation in this research is greatly appreciated.

APPENDIX B – SURVEY AS ISSUED TO STUDENTS



The University of Sydney

SYDNEY CONSERVATORIUM OF MUSIC



Student Questionnaire

1. Do you take music lessons outside of school? **Yes/No**

If yes, please write your instrument(s) and number of years studied:

2. On a scale of 1 to 5 (5 being the most positive answer) how much do you enjoy your classroom musical activities? (Please circle)

5 4 3 2 1

3. What do you enjoy most about your classroom musical activities?

4. Do you learn about different elements of music (such as rhythm, melody, loud and soft, harmony)?

Please specify:

5. What would you like to do more of in your classroom music lessons?

6. On a scale of 1 to 5, how challenging do you find your classroom music lessons?

5 4 3 2 1

7. How often do you understand what you are taught about music? (Please Circle)

Always Usually Rarely Never

8. Do you feel that class performances, festivals, and music nights are a good chance to show what you have learned about music? **Yes/No**

9. Are there any other ways you would like to be able to show what you have learned?

Please specify:

Thank you for your co-operation in completing this questionnaire.

APPENDIX C – INTERVIEW PROMPT SHEETS

Teacher Interview Prompt Sheet

Interview Questions:

1. **How have you designed your music programs to meet the specific academic needs of your students?**
 - Refer to the characteristics the teacher has outlined on their questionnaire.
 - Talk about classroom needs and behaviours.
 - Do they keep these characteristics and learning needs in mind when preparing lessons and programs?
 - Show teacher evaluation form – they check, discuss.

2. **How do you measure their levels of engagement, and their understanding of lesson content?**
 - Discuss assessment strategies, teaching styles.
 - How much practical/theory based learning in the classroom?
 - Enthusiasm of students?

3. **How effective do you feel your music programs are in meeting the educational needs of your students?**
 - Extra Curricular activities including excursions, concerts, bands, choirs, orchestras?
 - Do the levels of achievement reflect the potential and abilities of the students?

4. **What improvements do you feel could be made to the quality of music teaching and learning experiences in your classroom?**
 - Discuss.

Student Interview Prompt Sheet

Interview Questions:

1. Do you find your school music lessons engaging and challenging?

- Do you feel you learn something new each lesson?
- Are the activities interesting, with a balance between practical and theoretical activities?
- Are you assessed regularly on what you have learned?

2. Do you feel you are taught about the concepts of music (rhythm, harmony, melody, structure, dynamics, texture) in an effective way?

- Are there different approaches your teacher could take in teaching you about these concepts?

3. What changes would you make to your school music lessons in order to make them more challenging and interesting for you?

- Types of music studied
- Chances to perform
- Excursions/viewing of live performances
- Chances to compose own music for assessment