TEACH[R]

Boys' music education

Using the Boy's Music Ecosystem model to better understand successful teaching practices

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"The study revealed six themes that point to successful practices in boys' music education and the possible benefits of a longitudinal view across a boy's entire secondary school music experience"

Abstract

Experienced music educators rate their senior class of musicians by often using the terms exceptional, talented, average, limited, unremarkable or apathetic. This summative evaluation considers class size, academic results, willingness to participate in extra curricula musical activities or post secondary school career choices in the music industry.

Such characterisation by teachers raises the question: To what extent does this determination depend on the individual traits of the students, their musical experiences or the personal influence of their music teachers? This pilot study examined this question by comparing six cohorts of senior musicians over the six years of their secondary school music education within an action research context. Through the use of the Boy's Music Ecosystem model (Collins, 2011) and interview results, the study revealed six themes that point to successful practices in boys' music education and the possible benefits of a longitudinal view across a boy's entire secondary school music experience.

Introduction

At the conclusion of each teaching year my colleague and I (the two researchers involved in this study) review the performance of the senior music class, usually around the time their final grades are released. Students are viewed as individuals but often characterised as a group, labelling them as exceptional, mixed or sometimes a disappointing class. These labels are not derived from their academic grades only. Discussion includes the students' involvement in musical activities outside the classroom and the school, their approach to study and each other, their relationships with us as their teachers and their past experiences in music education.

After almost a decade of team teaching the senior music class, the researchers wanted to understand, what contributes to the quality of each class' achievements and to whom or what can it be attributed? This question forms part of a broader field of inquiry into the specific needs and motivations of boys in music education.

A review of literature

The field of boys' music education is small and often appears as a subsection of broader areas of research, such as Gender and Music Education or Adolescent Boys Development. These research fields tend to yield comparisons between boys and girls (Green, 1993; Brotz,1992; Abeles & Porter, 1978; Dews & Williams,1989, O'Neill & Boulton, 1996) in areas as broad as fine motor skill development, instrumental choice and creativity. The field of boys in music education has however gained momentum, after a period of focus on girls' academic development in the 1980s, and in Australia is championed by researchers such as Biddulph (2008) and Lashlie (2007).

Neuroscience has added a further dimension by examining brain function and behaviour in adolescent boys (Dahl, 2004; Feinberg, 2006). While this research has focused on understanding boys' approach to learning and social development, it has not been widely connected to boys' music education.

An area of boys' music education that has been investigated more fully is the area of singing. This area of research began to gain momentum when Koza (1993) coined the phenomenon the 'missing males', which referred to the lack of males involved in specific musical activities such as singing. Later research in fields such as education, psychology and health have examined this issue (Ashley, 2002; Hall, 2005). In *Perspectives on men and singing*, Harrison et al. (2011) take a broad view of boys and singing, presenting further research into this field. Currently the research points to a highly complex mix of physiological, psychological, social, cultural and emotional influences on boys and singing, and is highly specific to individual music programs.

While research into select musical activities with a focus on boys is a very important field for music teachers, a music program rarely consists of one activity. It is more than likely that a music program

will have multiple musical activities occurring simultaneously, catering to different age groups, instrumental levels and interests. The ability to identify, understand and evaluate this environment for its successes, flaws, hidden protocols and unintended outcomes is just as valuable to a music teacher as knowledge of better practice in a singular musical activity.

A succession of research projects has examined the reasons why, between the ages of 12 and 14 years, many boys change or cease their musical activities. These projects have identified specific teaching strategies, peer influences and elements of school culture that affect how boys make decisions about their musical activities. The outcome to date has been a better practice model, known as the Boys Music Ecosystem (Collins, 2009 & 2011), that can assist music teachers in strengthening their music programs for boys.

Boy's Music Ecosystem

The Boy's Music Ecosystem model emerged from a study that examined the teaching strategies, social influence and wider school issues that encouraged boys to remain involved in musical activities beyond the first two years of their secondary school education (ages 12–14) (Collins, 2005). This model identified six essences (success and accomplishment, interest and positive attitude, praise and acceptance) and seven elements (relationships, student character, teaching strategies, school culture, parents, role models and peers) that work together to either positively or negatively affect boys' continued involvement in musical activities past their early secondary school years. Further development of the model (Collins, 2009; 2011) incorporated research on boys' psychology and findings by Lashlie (2007) and Biddulph (2008).

All essences and elements were retained but the emphasis and interactions were refined. From research into the practices and structures used in programs that had high levels of participation, diversity and achievement it was discovered that boys needed to experience all six essences in order to continue with musical activities into their final years of secondary school.

This model can be used as a lens through which teachers can examine their own programs. It promotes the use of successful practices based on broad themes such as, how boys experience success and praise through their school culture and distinct teaching strategies rather than specific activities in programs. Clear identification and articulation of aspects supporting or hindering boys' attachment to music can then lead to more informed decisions regarding curriculum, budgeting and staffing.

Research focus

The pilot study that follows is the initial use of the Boys Music Ecosystem (Collins, 2009 & 2011) as a 'better practice' model to evaluate an individual music program. The research project was designed to reveal a holistic and detailed picture of the strengths and weaknesses of the selected music program by focusing on specific class groups over a given period.

Method

This is a case-study completed within a participatory action research methodology, potentially being the first cycle within a whole school subject program evaluation, supporting development and supervision. Data were collected from the teacher/researchers.

The school

The pilot study was carried out in an independent, pre-school to Year 12 (P–12), co-education (Prep–Year 2) and all boys (Year 3–Year 12), school in Australia. At the time of the study, the school had close to 1500 students.

The Music Department, involving eight staff (part-time and full-time), taught music to every year level, P–12. In Years 3–6 there were selective music classes for students who show above average abilities in both music and academic studies. During Years 7 and 8 (first years of secondary school) students received one semester of academic music as part of a larger rotation of arts activities. From Year 9 onwards students could elect to take music as an academic subject. Class sizes in academic music were typically 12–18 students.

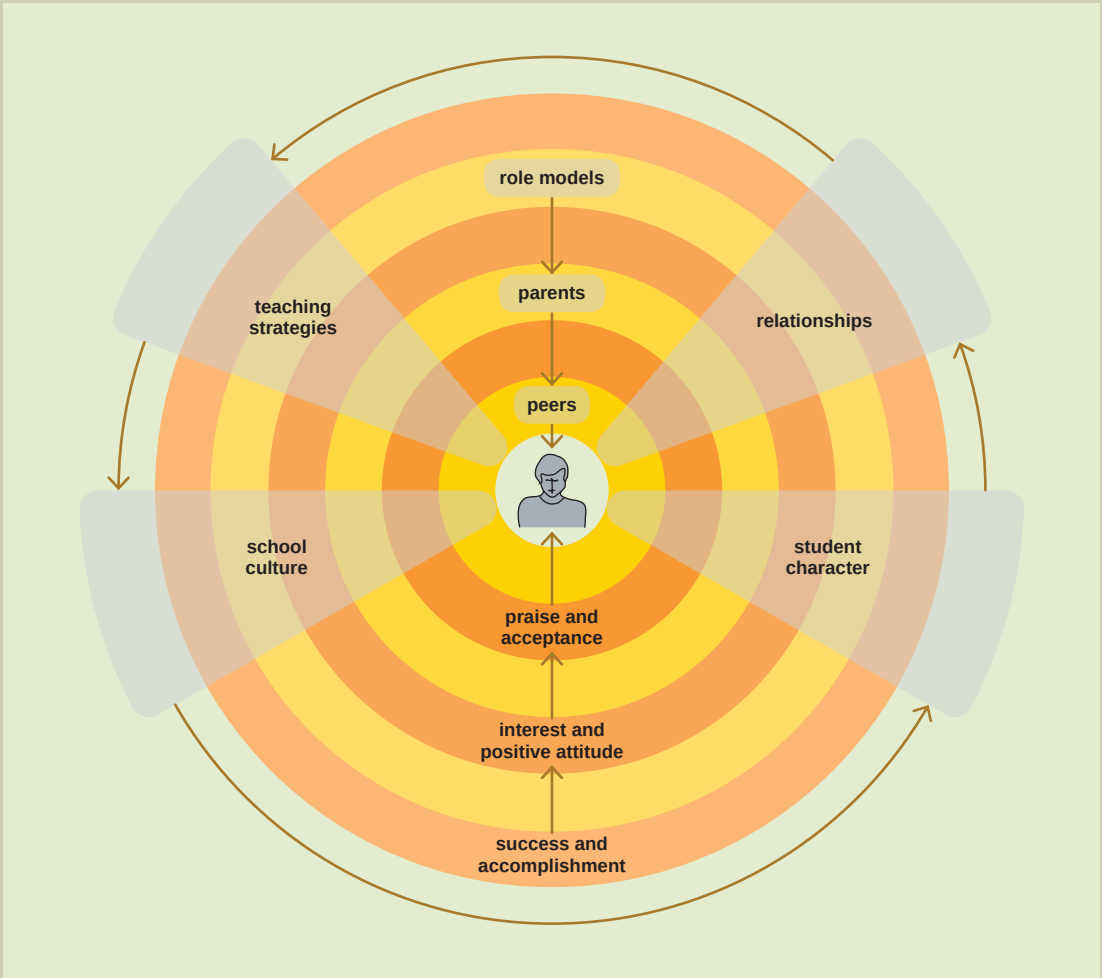
Co-curricular music activities for Years 7–12 allowed participation in performance ensembles that rehearse weekly, and both perform and tour regularly. These ensembles included different levels of choirs, orchestras, concert bands, jazz bands and instrumental ensembles. Many boys' musical ensembles included students from the equivalent girls' school, which was just over two kilometres away. Currently, the combined program consisted of 18 ensembles involving around 400 students, staffed by both classroom teachers and specialist instrumental teachers.

Selection and categorisation of Music classes

Prior to the evaluation interview, in-depth discussions between the two researchers developed a set of criteria by which classes could

"A succession of research projects has examined the reasons why, between the ages of 12 and 14 years, many boys change or cease their musical activities"

Figure 1: Boy's Music Ecosystem (Collins, 2011)



Process elements are dynamic and interactive both between themselves (circular arrows) and as they penetrate experience of the 'essences'. Broad concepts of element outcomes become focussed as they impinge on an individual.

Each student is encapsulated within three 'spheres' of intensifying relational elements that influence by creating or 'operationalising' the experience of the 'six essences'.

All experiential 'essences' are essential and delivered to the student from an encompassing 3D environment. Most broadly from more distant and diffuse relationships: *Role models* filter perceptions of success and accomplishment, *parents* mediate affirmation and support both interest and positive attitudes. Of greatest importance is *peer* praise and acceptance of the person as well as the performance, processes influenced by parental opinions and behaviours.

be categorised as exceptional, mixed ability or underachieving. The selection criteria included the following measures:

1. Level of achievement in their final school examinations;
2. Level of involvement in academic program (students could select the standard music course or the extension music course);
3. Level of involvement in co-curricular ensembles (within the school);
4. Level of involvement with musical activities outside of the school;
5. Level of leadership within the school music program (including roles as music captains and music tutors);
6. Level of musical study at a tertiary level.

In order to create a useful data group upon which to base the evaluation interview, six Year 12 graduating classes were chosen from the nine that the two researchers had team-taught. The rubric derived from the criteria above (Table 1) was used to characterise these six classes as exceptional, mixed or underachieving.

The music experience of each class during their six years in secondary school was then reviewed to identify any significant patterns. This table proved an invaluable reference tool during the evaluation interview as comparisons between the classes were easily highlighted and debated.

“The music experience of each class during their six years in secondary school was then reviewed to identify any significant patterns”

Development of the interview protocol

In order to utilise the model as an evaluation tool, a series of themed interview questions were designed and used in a semi-structured interview format to focus on the elements of the model, while providing flexibility for new revelations and connections to emerge (McMillan & Schumacher, 2010). The design of both the questions and the interview process, considered the position and perspectives of the participants. Since the model is designed to assist music teachers in evaluation of their programs, and they may struggle to engage with objectivity (Gall et al., 2010) the questions are ordered and formatted in such a way as to examine a given issue from multiple perspectives in order to provide internal validation (McMillan & Schumacher, 2010).

Table 1: Selection criteria for categorising classes as exceptional, mixed ability or underachieving

Selection criteria	Exceptional classes	Mixed classes	Underachieving classes
1. Level of achievement in their final school examinations	Majority of class achieved at or near the top of the grade range	50% of the class achieved at or near the top of the grade range and 50% achieving at or below the mid grade range	The majority of the class achieved at or below the mid grade range
2. Level of involvement in academic program	Majority of students electing extension program	Approximately 50% of students electing extension program	Less than 50% of students electing extension program
3. Level of involvement in co-curricular ensembles	Students involved in two or more co-curricular music ensembles	Students involved in two or less co-curricular music ensembles	Students involved in one or less co-curricular ensembles
4. Level of involvement with musical activities outside of the school	More than 50% of students involved in musical activities outside of school	Between 25% and 50% of students involved in musical activities outside of school	Less than 25% of students involved in musical activities outside of school
5. Level of leadership within the school music program	100% of students involved in some form of leadership in the music program	60% of students involved in some form of leadership in the music program	Less than 30% of students involved in some form of leadership in the music program
6. Level of musical study at a tertiary level	More than 30% of students continued onto either tertiary music study or involvement in musical activities at a tertiary level	Between 10% and 30% of students continued onto either tertiary music study or involvement in musical activities at a tertiary level	Less than 10% of students continued onto either tertiary music study or involvement in musical activities at a tertiary level

As experienced teachers of the senior music classes, leaders in the Music Department and decision-makers regarding the design and operation of the Music program, my colleague and I filled the dual role of researchers and interview participants. Thus, we were 'complete insiders' (McMillan & Schumacher, 2010). As participatory research, the study utilised specific planning and verification procedures to maintain validity.

Data analysis

An audio recording of the evaluation interview was transcribed and coded using a Narrative Research Design (Creswell, 2008). Soon after the interview the principal researcher, made a log of personal interpretations and emotional reactions to the content and experience of the interview (Gall et al., 2010). This was an important 'litmus test' during and after the coding of the interview data to ensure that the emerging themes were representative of both researchers' views. This process was strengthened through a collaboration process, inviting comment on the identified themes from the second researcher (Creswell, 2008).

> ***"The students in the exceptional classes worked effectively as a team and supported one another within and outside their musical activities, and friendship groups often mirrored musical groups"***

Results

The evaluation process revealed both expected and unexpected results. As expected, themes emerged, which will direct decisions on teaching practices, curriculum development and placement of staff and budget priorities in the coming years. However, a longitudinal pattern also emerged, indicating that specific events may influence boys' music experience. These two interrelated areas of findings provide a micro and macro view of the boys' music experience.

Class size

During the interview process an additional factor came to the fore. It became clear that participation numbers could be influencing the achievement levels of the six classes. Both exceptional classes had over 12 students; both mixed classes had between 8 and 12 students and the underachieving classes had less than 7 students. This result appears to support the finding from the Boy's Music Ecosystem that highlighted the need for a critical mass of boys involved in musical activities to positively influence school culture and overall achievement.

Themes

Thematic analysis of qualitative interview data usually results in between five and seven themes (Creswell, 2008). This study yielded six themes:

1. Be involved (with your peers);
2. Classroom teacher in Year 7 to 10;
3. Motivation;
4. Parental support;
5. Boys as role models;
6. Messages from the school culture.

Although the content and underlying issues amongst the themes overlap at times, they present an important view of the principle influence factors in a boy's music education.

Be involved (with your peers)

Music education is a multi facetted experience. Singular involvement in academic music is not enough. Comparing the class groups, students in the *exceptional class had greater involvement* in multiple musical activities at a variety of levels. This may help explain their higher levels of achievement in academic music and continued involvement in musical activities after completing secondary school. Essentially, these class groups chose a richer musical life.

The students in the *exceptional classes worked effectively as a team and supported one another* within and outside their musical activities, and friendship groups often mirrored musical groups. In addition, individual students *displayed a stronger sense of self and a high level of respect for one another*.

> ***Researcher 2:*** I think the crucial thing that is starting to emerge is that you have to be involved in things [musical activities], you can't just do music in class, you actually have to be involved in ensembles to get the whole experience…so you are actually in class with your friends who you sit and make music with.

Large school musical events where senior musicians mentor younger musicians in tutorials and massed school performances, were also found to be significant.

> ***Researcher 2:*** This is where the sequential [mentor] program is so important, so the younger student can see that if they do this and this and this, they can be as good as the role model standing next to them.

The musical activities that seemed to have the greatest impact on students' overall musical achievement were the touring programs. These programs are carefully designed to capitalise on the students' friendship groups at specific and sensitive periods in their musical and personal development. It was found that the exceptional and higher achieving students in the mixed classes all participated fully in this touring program.

Researcher 1: It is also the tour grouping…we take the top groups [all year 10–12 students] or the middle groups [generally Years 9 and 10]. We would never take the youngest and oldest group away together.

Researcher 2: We carefully decided what their social needs were and worked on the peer relationships.

Researcher 1: We also take a group of singers and band musicians away together to break down any rivalry or bias that might exist.

The evaluation revealed that when comparing the music touring experience of the exceptional and underachieving class, the former were involved in two extensive international tours, whereas the underachieving group were only exposed to short regional tours.

Classroom teacher in Years 7 to 10

The academic music experience of the different classes fell into two sub-themes: teaching strategies and the individual teacher's connection with the students. The students in the *exceptional classes were exposed to a teaching style which allowed significant student choice* in content and learning styles while the *underachieving classes were exposed to a teacher-led strategy*. Interestingly, the mixed classes consisted of more students who had not been at the school during their Year 7 to 10 years, and therefore had highly varied learning experiences, both in style and content.

Researcher 1: They had more than one person [teacher] telling them "that's good", but they had multiple people giving varied feedback.

Researcher 2: And we included the whole class in giving feedback all the time and they [the students] got to see where they stood in comparison to everyone else…We let them make their choices and then guide them in their choices.

Researcher 1: Rather than making their initial choices for them and then allowing them to comment.

Researcher 2: And we only intervene when they are about to crash and burn.

Researcher 1: But even then, we always outline why things are a bad idea.

Researcher 2: And we tend to use examples of past students to illustrate our point [students the boys would have known].

While examining the differences in teaching styles, *the narrative teaching strategy was identified as being of significance*. All classes would have experienced this teaching style to some extent, but the underachieving class to a far lesser extent. This difference may be linked to the propensity for underachieving classes to seek external rather than internal recognition for their musical activities, and may also relate to a subsequent theme, motivation.

The Music teacher's connection with the students emerged as an important factor. The *exceptional and mixed classes were taught by a team of teachers* who had complimentary but individual personalities. The team was made up of both male and female teachers and although not explicitly planned, usually worked in pairs consisting of one male and one female teacher. As a team, the staff had a variety of teaching experience and expertise. Each teacher bought different skills and foci to the team, including the use of technology in the classroom, recording techniques, effective evaluation and peer learning.

The modelling of effective teamwork by the staff may have influenced the students. Similarly, exposure to different teaching personalities may have allowed them to connect more readily with at least one of the teachers. Each member of this team of teachers was also overtly passionate about music learning and music making. The lack of these factors is highlighted by the experiences of the *underachieving classes who experienced only one teacher* for the majority of their Year 7 to year 10 music experience; one who chose a more teacher-centred and reserved approach to music learning.

> ***"The students in the exceptional classes were exposed to a teaching style which allowed significant student choice in content and learning styles while the under-achieving classes were exposed to a teacher-led strategy"***

Researcher 2: There are a couple of things you need to line up in order to make it all happen [for the boy]. There has to be the right staff member and the right circumstance. If you haven't got the right teacher you can actually poison the students' interest in that activity.

Researcher 1: What are those things that have to line up?

Researcher 2: Personality, passion and the ability of the teacher.

Researcher 1: Because they might be a nice person, but if they aren't passionate or able then the student doesn't get everything they need.

Motivation

A common thread throughout the evaluation interview was the motivation of the students to be involved in musical activities. The *exceptional and mixed classes had a strong sense of 'giving back'* to the music program in their senior years and relished the opportunity to mentor younger musicians. They often did this through tutoring younger musicians and accompanying them on tours, activities for which they would receive little public recognition.

Conversely, the *underachieving class only involved themselves in musical activities where they would gain personal recognition*, such as school wide rock competitions. This may have been due to the respect they gained from the broader school population for displaying their musical abilities through a pop genre (rather than other styles of music). The external praise received may satisfy their extrinsic motivations.

A difference was found between the groups regarding their preferences for how to label themselves as musicians. *The exceptional classes and some members of the mixed class liked being labelled as musicians* whereas the members of the *underachieving classes made a point of being identified as specific types of musicians* such as a rock drummer or jazz guitarist. Where these choices stem from was a topic of much conjecture during the evaluation interview, and led to broader questions about the prevailing school culture and view of musicians during their secondary school years.

The different types of interpersonal relationships exhibited by the students emerged as an external manifestation of their internal motivations. The exceptional and mixed classes openly supported each other, even when they were not friends, whereas the underachieving classes tended to 'gang up' to pull another student down.

> ***"The exceptional and mixed classes openly supported each other, even when they were not friends, whereas the under-achieving classes tended to 'gang up' to pull another student down"***

Parental support

The variable nature of each student's character, their relationship with their parent(s), and the parent(s) approach, motivation and involvement in their child's musical activities, were all discussed. These factors led to the conclusion that parental involvement and interaction with the music program needed to be handled on an individual basis.

However, when comparing the exceptional and underachieving classes, a consistent factor became apparent. Although the majority of the *parents of the exceptional students supported the musical activities of their boys, they allowed them significant leeway in their choice of interests*. Essentially, the boys steered their musical choices. A large number of the *parents of the students in the underachieving classes, however, were more vocal and autocratic about the musical choices their sons made*. It appeared that the lack of choice afforded these boys actually drove them to pursue different musical activities than those their parents encouraged. This often created stress within the family unit, which led to the development of resentment of musical activity in general.

Boys as role models

Although the students had interacted with exceptional adult male role models through the music program, the peer-mentoring program seems to be the key motivator. From the perspective of the researchers, the numerous testimonies from boys who had grown under the guidance of an older boy, was a strong indicator of the vital role this program can play.

> ***Researcher 1:*** By the sounds of it the most powerful role models are the older [students] to [the] younger students.
>
> ***Researcher 2:*** Definitely, but it has to be only a few years, not a Year 12 boy to Year 1 boy, it works best with a Year 12 boy to a Year 8 boy.

Interestingly, the *underachieving classes had either not chosen to or had not been given the opportunity to experience this specific type of role modelling during Years 8 and 9* and were reluctant to involve themselves in the mentoring experience in Year 12.

Messages from the school culture

Comparing the different classes it became clear that events outside the music program could send both positive and negative messages about musical activities and masculinity to the boys. These messages concerning the place and appropriateness of musical activities in a boy's life came from both the school leadership and the boys themselves.

In this school, the weekly school assembly forms the key event at which administrators set the agenda for the student body. Over the period of this study, there was a significant change in the messages from the school leadership about being a boy and a musician. This change was significantly influenced by a new senior staff member being put in charge of the weekly school assembly. The focus of assembly moved from valuing a liberal, almost 'Renaissance man' culture to a primarily sports focus with arts and other activities being reported briefly at the end of assembly or not at all.

How the musicians interpreted this change seemed to depend on the year they were in when it happened. The exceptional classes saw it in a positive light, as it made them more unique from the common school culture. For the 2007 graduating class, this change occurred when they were in Year 11. By this time, they had already established their place in the school culture.

> ***Researcher 2:*** They were seen as being a little outside the common culture—.
>
> ***Researcher 1:*** —and they liked that.
>
> ***Researcher 2:*** Yes they did, it reinforced their sense of identity, it is a part of the school where they feel safe to be themselves, and where they are appreciated for what they do, they are not sporty and they are not always the high academic achievers.

However, for the 2010 graduating class, the change took place when they were in Year 8. Lashie (2007) found that this age is a time when boys are more influenced by peers than by role models. This culture change may be a factor that contributed to this class being an underachieving group. The 2011 graduating class experienced this change in Year 7. As a new group to the secondary school the senior staff member leading assembly probably had a strong influence on how these boys interpreted the explicit and implicit school culture.

This perplexing issue was highlighted in the interview when comparing the response of a boy from an exceptional class with responses of underachieving classes to the tension between sportsman and musician.

> ***Researcher 2:*** And the students saw that he [the exceptional music student] could do these two things [sport and music] successfully, he was confident enough in his ability and confident enough in himself as a person to say, for me, music is the most important thing.
>
> ***Researcher 1:*** The more the other students gave him a hard time, the more confident he became and he was willing to take on their misconceptions. But as you look at the underachieving groups, the more of a hard time they were given by students [for their musical activities] the less confident they became.

It is understandable that the sporting culture is strong. Involvement in sporting activities is compulsory from Year 7 to year 10, whereas musical activities are not. With close to 800 boys participating in sporting activities (compared to 300 in musical activities), most students are able to recognise an elite sportsman and have experience on which to base an understanding and appreciation of the achievement. It is more difficult for the student body to understand and appropriately acknowledge an elite musician.

Implications

The Boy's Music Ecosystem model was found to be a valuable tool through which to view a music program. Specific structures and processes can now be put in place to address the themes that emerged from the evaluation interview.

Peer Relationships: The importance of sustained friendships across the music program will be utilised by an expansion and diversification of the touring program. Since friendships grow through shared experience and interests, academic and co-curricular music experiences will be more closely partnered in the future.

Teachers: The standard and style of teaching will require better quality controls and planned rotation of staff will allow all students to receive the team teaching approach.

Motivation: With the development of the selection criteria for classes (Table 1), it will be possible to identify underachieving classes earlier in their music education. The current study revealed a strong focus on extrinsic motivation and personal judgement in underachieving classes. It may be beneficial to extend these students' skills in critical and artistic discernment. This could serve as a stronger theme through the entire music curriculum.

Parents: The initially contradictive theme that calls for both support and space from parents will be incorporated more openly in the music program. Parents will be better informed regarding the role of touring and large musical activities in the development of both independence and teamwork.

Boys as role models: The development of teamwork skills, mutual respect and interpersonal skills amongst students and staff will be targeted from Year 7. Potentially underachieving groups will be identified and managed at an early stage. This may take the form of more specific mentoring opportunities.

School culture: Acknowledging and capitalising on the broader effects of arts education could change many aspects of the school culture and benefit the current perception of music education for boys at the school. In addition, more open and explicit discussion between the music department and school leadership about the implicit messages that boys understand about being a musician have already begun to take place. Not only are the messages from administrators important, but the manner in which boys interpret those messages and, in some cases, reflect back those messages to teachers, peers and parents.

> ***"Acknowledging and capitalising on the broader effects of arts education could change many aspects of the school culture and benefit the current perception of music education for boys at the school"***

Further research

During the evaluation process, school-wide events often arose as factors that may affect a boy's music experience. In the Boy's Music Ecosystem model, these influences and events are 'School Culture' elements. The impact of such events on all aspects

of the boys' music and school experience warrants further attention.

This study focused on school-based musical activities, ignoring other music experiences. The influence of musical experiences prior to entering secondary school (Year 7) will be investigated in a separate study. Also worthy of investigation is the impact of the weekly private instrumental lesson.

Other initial findings that warrant further study include:

- The apparent three-year cycle of exceptional, mixed and underachieving classes.
- The possible connection between the approach that each Year 10 cohort of students has to music on the approach that the Year 7 cohort of students then takes to music.
- The influence of strong peer groups on adjustment to shifts in school culture.

Overlaying the students' school experiences with their approach to their musical activities could yield new understandings and may be the next evolution of the Boy's Music Ecosystem model.

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This pilot study has revealed interesting aspects of one music program in one school context. The model needs to be tested in a variety of educational settings in order to prove its validity. Similar studies in co-educational and girls' school settings may reveal which essences and elements are specific to the cultural and social influences of a boys' single sex educational environment and those that are common to all school music programs.

Conclusion

The evaluation of this music program against a better practice model has facilitated the emergence of themes that are being used to strengthen the program. This study has highlighted a possible cycle of classes in terms of achievement and involvement, the connection between role modelling by boys at a crucial stage, influence of school leadership and the importance of positive peer groups. TEACH

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