Independent Evaluation of the Music Learning Outcomes in the Sistema Aotearoa Programme

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Independent Evaluation of the Music Learning Outcomes in the Sistema Aotearoa Programme

Photograph: Lizzie McCollum

Photograph: Adrian Malloch
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Acknowledgements

We warmly acknowledge the contribution that different individuals and groups have made to enable this evaluation to be completed. We hope the findings and recommendations will provide useful information regarding the “Sistema Aotearoa” programme.

We especially acknowledge students, whānau and tutors that participated in this evaluation. We appreciate the time and effort tutors spent completing the questionnaires in their own free time.

We thank Auckland Philharmonia Orchestra, particularly the Programme Director, Dr. Joseph Harrop, and the Programme Facilitator, Rosalind Giffney, who provided excellent, and much appreciated, help and support throughout the evaluation process.

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Executive Summary

This evaluation was commissioned by Auckland Philharmonia Orchestra (APO) to evaluate the music learning outcomes and to identify features of effective implementation of the trial programme, Sistema Aotearoa. The programme is a two year trial, modelled on El Sistema, an orchestral programme initiated in Venezuela in 1975, and which aims to transform the lives of children in poverty through music (Tunstall, 2012). El Sistema now has a high international profile and Majno (2012) attributes the fast spreading international reach of the programme as testament to its success.

Sistema Aotearoa is a local adaptation of El Sistema, and is based in Otara, Auckland. Students, aged between six and eight years, are drawn from seven local schools. There is an open selection policy, and participation in the programme is voluntary. There is no financial cost to participants, which is an important principle of El Sistema.

The overall goals of El Sistema focus on the transformative and socio-cultural aspects of the programme, with implicit goals for music education. In 2012, a team of researchers from Auckland University of Technology (AUT) implemented a large-scale evaluation that focused on the socio-cultural outcomes of the trial programme. The key finding of that evaluation was that Sistema Aotearoa is making a valued contribution to children’s musical development, as well as development of positive values, skills and behaviours (refer Appendix A).

This smaller-scale evaluation focuses more specifically the music learning outcomes of the trial programme while taking into consideration a broad range of factors that impact on music learning. The New Zealand Curriculum (Ministry of Education, [MoE], 2007) states: “learning is inseparable from its social and cultural context” (p. 34) and, in a similar vein, Alton-Lee (2003) talks about the interdependence of socio-cultural and cognitive dimensions of learning. Inevitably, there is some overlap between the two reports and some of the findings concur, which serves to strengthen points made in both reports.

The fieldwork was carried out in October - November 2012, and other data was gathered in December 2012. The short time frame of the evaluation provided a snapshot of the overall programme in relation to four themes that the APO sought responses to:

1. The learning and teaching of orchestral string playing

2. Curriculum content and children’s progress
3. The operations and protocols relating to effective and safe delivery of curriculum content

4. Sistema Aotearoa’s relationship with connected schools and the staff at those schools

The availability of eighteen months of implementation provided a means of making a response to two key evaluation questions:

1. What patterns of musical development do students in the Sistema Aotearoa trial programme show?

2. What are the specific features of the Sistema Aotearoa trial programme that contribute to learning in music?

To answer these questions, we employed a formative evaluation approach, using student and tutor observations, and analysis of programme documentation and tutor questionnaires to gather data and overall impressions of students’ music learning and features of the programme that impacted on learning.

Participants

Students and whānau in both cohorts were approached face-to-face during normal class sessions and invited to participate in the evaluation. We received written consent from ten students in the first cohort (year two of the programme) and from three students in the second cohort (year one of the programme). The imbalance of numbers of participants could be attributed to fewer opportunities to make contact with the second cohort.

Tutors were also approached face-to-face and invited to participate by allowing us to observe their teaching content and strategies and/or to complete a written questionnaire. Five tutors consented to be observed. Four tutors consented to complete the questionnaire, and three of the questionnaires were returned to the research team.

Measures

We relied on five sources of data:
1. Student observations

2. Tutor observations

3. Observation of performances

4. Programme documentation

5. Tutor questionnaires

Student Observations

Two observation schedules were developed to guide student observations.

Firstly, a semi-structured observation schedule was developed to assess some key musicianship skills of individual students while participating in a group. The students were observed at various times, in a variety of settings over ten observations. The same observation schedule was used to record anecdotal notes relating to general impressions of performance in each of the two cohorts.

Secondly, an evaluative performance rubric was developed, in consultation with a string-playing expert, to evaluate some generic string playing skills of individual students while participating in group activities.

Tutor Observations

An observation schedule was developed in order to gain information about aspects of pedagogy and learning content implemented by tutors in the programme. The schedule was semi-structured to avoid making assumptions about what could or should be included in the sessions. The purpose of the observations was to look for patterns in content and delivery, rather than to evaluate calibre of individual tutors.

Observation of Performances

Two live performances were viewed in November 2012. All available video-recorded performances and documentary video clips were viewed for overall impressions. Anecdotal notes were recorded while viewing both live and recorded performances.
Programme Documentation

Staff provided researchers with copies of programme documentation, which included planning and programme notes for students in both cohorts and for holiday programmes. Blank copies of students’ workbooks were included.

Tutor Questionnaires

A questionnaire was developed by the research team, informed by feedback from the Programme Director of Sistema Aotearoa, which included six open-ended questions relating to the evaluation questions.

Summary of Key Findings and Recommendations

Key Findings

Below are key findings in relation to the evaluation questions:

1. What patterns of musical development do students in the Sistema Aotearoa trial programme show?

2. What are the specific features of the Sistema Aotearoa trial programme that contribute to learning in music?

Patterns of Musical Development

Observations of individuals and groups indicate that the Sistema Aotearoa trial programme fosters and supports music learning in terms of both orchestral string playing, and general musicianship. There are no clear criteria that serve as benchmarks for comparison, due to the uniqueness of the programme, and its early stages of implementation. However, it is the opinion of the research team that, considering the age of the students, and the large group ensemble setting, students demonstrate a good range of musical competencies. This opinion is informed by a synthesis of data and researchers’ experience and professional knowledge. Evidence of differentiation between the two cohorts indicates that involvement in the programme over time has a positive impact on students’ music learning. Below are key findings relating to musical development for string playing, general musicianship and perceived differentiation between the two cohorts:
1. Analysis of data recorded on the matrix developed by the research team to evaluate string playing skills indicates that, in general, students demonstrate good posture, left and right hand positioning, bow usage, intonation and competency in crossing strings. There was clearly a good degree of overall progress made when comparing the two cohorts, particularly with regard to fingered notes, and intonation.

2. While it is difficult to ascertain how much student achievement may be attributed to new learning arising from involvement in the programme, overall, students demonstrated a number of well-developed general musicianship skills such as keeping a beat, playing with rhythmic accuracy and control, and maintaining a part while playing in an ensemble setting.

3. There is evidence of differentiation between music competencies demonstrated by students in their first year in the Sistema Aotearoa trial programme (Cohort 2), and students in their second year of the programme (Cohort 1), which indicates a good degree of progress. While factors such as age and maturation should be considered, students in the first cohort (year two of the programme) generally showed increased listening focus, greater rhythmic control, particularly when playing in parts. They also showed greater focus on following the conductor’s lead and more consistent technique with all aspects of string playing.

**Specific Features of the Programme**

Below are the key findings relating to features of the programme that impact on students’ learning:

1. There is good curricular alignment between resources, teaching materials and the goals of the programme. This is a factor that is deemed to increase student motivation and “accomplish instructional purposes and goals” (Alton-Lee, 2003, p. 9).

2. Analyses of data show that the content and implementation of the programme make strong connections with the achievement objectives and criteria for affective pedagogy in the New Zealand Curriculum (MoE, 2007).

3. The effectiveness of the programme on students’ learning is enhanced by a number of features including efficient organisation and management, teacher expertise, pedagogically sound teaching practices and appropriate assessment strategies.
Recommendations

Overall, *Sistema Aotearoa* offers students quality learning in music, with enjoyment and engagement, in a nurturing environment. In addition to the transformative benefits of involvement in the programme reported by AUT (2012), it is clear that the music skills and understandings developed in the programme provide young children with a solid foundation for musical growth, both in terms of string playing, general musicianship, and ensemble playing. The trial programme has raised community awareness of music education. Therefore, the main recommendation concurs with that of the AUT report (2012):

1. That all parties involved should endeavour to ensure the continuation and sustainability of *Sistema Aotearoa* (AUT, 2012, p. 106).

Other recommendations that might enhance the existing programme:

2. The trial period of the programme and two evaluations will provide useful feedback to stakeholders involved in *Sistema Aotearoa* to develop written guidelines to ensure that all those involved share a common understanding of what the programme is setting out to achieve, and what is expected of their involvement. This could include a programme overview, and rubrics of learning stages to clarify teaching and learning goals. By consulting various stakeholders, including whānau, schools, tutors, helpers, and Auckland Philharmonia Orchestra, they “are more likely to develop a sense of ownership and ensure programme sustainability if they are empowered to contribute to the development and future directions of the programme” (Murphy, Rickard, Gill & Grimmett, 2011, p. 298).

3. Provide students with a stronger sense of involvement in the learning-teaching process through by adopting a more metacognitive approach. Metacognitive awareness is like a ‘seventh sense’ that successful learners consciously and unconsciously apply to their learning and helps them understand and respond to the question: *What do I need to get better at?* (Alton-Lee, 2003; Nisbet and Shucksmith, 1986). This might be manifested in a number of ways such as focusing on ‘learning intentions’ rather than ‘teaching goals’, While modelling and teaching are essential for “acquisition of skills and knowledge of the craft” (Barone & Bresler, 2006, p. 3), a shift in focus from the teacher’s intentions to what the student perceives to be of value could promote ownership and transparency of learning. Opportunities for students to reflect on their learning could be incorporated into regular sessions and holiday courses, and there could be opportunities for students to critique their own group

4. There is an increasing number of schools that are adopting systems such as ‘knowledge net’ where students, right from the beginning of their schooling, use online reflective learning journals, which might be a consideration in forward planning. This could lead towards the establishment of a learning community, where students, tutors, whānau, classroom teachers and possibly peer tutors, when the programme expands, have input into the learning process, including ‘next steps.’

5. The content of the programme is pedagogically appropriate and effective, designed to engage the students and to foster quality learning. Content could be further enhanced by:

- Considering ways to involve aspects of movement into class sessions. As well as echo singing and call and response activities that are currently used as effective management tools, body percussion activities and action songs would add an element of movement to the programme, which is pedagogically appropriate for this age group.

- Ensuring that the activities set out in the workbooks used in the holiday programmes have relevance for the students by having direct and meaningful links to prior learning. There are some examples in the workbook, where learning activities are contextualised “in their musical completeness” (Nerland, 2007, p. 406), and this could be developed further.

- Continuing to develop playing and singing repertoire that reflects local culture. It is evident that efforts have been made to provide students with a rich and varied repertoire of songs and pieces to play. While it is important for students to ‘expand their horizons’ as discussed earlier, inclusion of more New Zealand music would further enhance the unique identity of Sistema Aotearoa.
1. Overview

*Sistema Aotearoa* is a two year trial programme modelled on *El Sistema*, a programme initiated in Venezuela in 1975 by Dr. José Antonio Abreu, intended to transform the lives of children in poverty through music (Tunstall, 2012). The programme now has a high international profile and Majno (2012) attributes the fast-spreading international reach of the programme as testament to its success. According to Tunstall (2012), many graduates of *El Sistema*, such as conductor Gustavo Dudamel, and violinist Alexis Eustache, have gone on to pursue successful international careers in field of classical music.

*El Sistema* combines a range of methodologies, involving both singing and ensemble playing of orchestral instruments. While Allan, Moran, Duffy & Loening (2010) argue that the programme is highly structured, there are no clear international guidelines other than general principles, which are identified in the AUT report (2012) as:

- The programme is free, open and accessible
- The programme is group-based
- The programme is inclusive, flexible and holistic

Booth (2009) and Majno (2012), consider that regularity and intensity of the programme, and the pursuit of artistic quality and reward of excellence, are also key principles underpinning *El Sistema.*

The lack of prescriptive guidelines for Sistema-based programmes allows for local adaptations, which are commonplace in educational programmes. These adaptations are not only inevitable, but also to be celebrated, according to Tunstall (2012), and local variations “are arising spontaneously through autonomous self-invention” (p. 272), as different countries find a variety of ways to grow and sustain programmes. Dr. Abreu, founder of the original *El Sistema*, asserts that a “simple transplant” of *El Sistema* is not viable, and he proposes that “a translation to the specificities of each context” to be a more reasonable expectation (Majno, 2012, p. 58). It is evident that since *Sistema Aotearoa* commenced in April 2011, efforts have been made to evolve a programme that reflects the local community of Otara from where the students are drawn from seven local schools (AUT, 2012).
1.1 Evaluation of the Music Learning Outcomes

When evaluating the effectiveness of any education programme, it is important to consider not just the learning itself, but also factors that impact on that learning. In general, the effectiveness of educational programmes derives from several features. Alton-Lee (2003), who has carried out extensive research in this field, has identified ten characteristics of quality learning and teaching which are:

1. Quality teaching is focused on student achievement

2. Learning groups work as caring, inclusive and cohesive learning communities

3. Effective links are created between school and other cultural contexts in which students are socialised

4. Quality teaching is responsive to student learning processes

5. Opportunity to learn is effective and sufficient

6. Multiple task contexts support learning cycles

7. Curriculum goals, resources, task design, teaching and practices are effectively aligned

8. Pedagogy scaffolds and provides appropriate feedback on students’ task engagement

9. Pedagogy promotes learning orientations, self-regulation, metacognitive strategies and student discourse

10. Teachers and students engage constructively in goal-oriented assessment

We know that the role of the teacher is very significant. Factors such as the feedback, their use of deliberate acts of teaching and how they use their ongoing assessments, both formal and informal, for planning next steps are very significant attributes. There are other teacher attributes of importance such as the strength of positive relationships, the degree to which their pedagogy is culturally responsive, and their knowledge relating to the subject and how to teach it. “Other important factors influencing students’ achievements are the expectations and support of significant people in their
lives, the opportunities and experiences they have in and out-of-school, and the extent to which they have feelings of personal success and capability” (National Education Monitoring Project [NEMP], 2008, p. 36).

It would take a much more intensive and developmental evaluation to explore all these aspects. However, we were concerned about describing developmental features of children’s learning and general properties of the teaching and learning within the limitations of the study design.

In summary, this evaluation aimed not only to examine the impact of the programme on learners, but also to identify features of effective implementation. The focus was on four specific areas:

1. The learning and teaching of orchestral string playing
2. Curriculum content and children’s progress
3. The operations and protocols relating to effective and safe delivery of curriculum content
4. Sistema Aotearoa’s relationship with connected schools and the staff at those schools

These key areas were explored using two main evaluation questions:

1. What patterns of musical development do students in the Sistema Aotearoa programme show?
2. What are the specific features of the Sistema Aotearoa programme that contribute to learning in music?
2. Methods and Procedures

*Sistema Aotearoa* is in the second year of its trial period. The purpose of this small-scale research project was primarily to ascertain how effective the trial programme was in fostering music learning, in relation to the early stages of the trial programme. The data was gathered over a two-month period, and the context of the learning was in relation to practice and preparation for a series of public performances.

2.1 Design

The evaluation of the trial *Sistema Aotearoa* programme used a formative evaluation model, an approach that allows the researcher to focus on the operations and dynamics of a programme as it is happening, in order to gain insight into its strengths and weaknesses (Patton, 1979). The evaluation model involved elements of action research in that it was context dependent, goals were negotiated, and not all insights were quantifiable (Silverman, 2010). The design also involved elements of single case study research because it set out to examine a unique phenomenon that was considered worthy of investigation (Gray, 2004).

The availability of eighteen months of implementation provided a means of looking at some degree of levels of implementation and change over time. That is, because there was a cohort of children who were half-way through their second year (Cohort 1) and a cohort completing their first year (Cohort 2), we could obtain a sense of the generic principles of *Sistema Aotearoa* of intensity and frequency at work. It was possible to provide an initial response to the evaluation question: Given more extended exposure to the programme, did children make progress? In design terms, this is like a simple ‘quasi-experimental’ design.

2.2 Participants

Students involved in the programme are drawn from seven schools in Otara, and the majority are Māori and Pasifika, reflecting the general demography of the schools involved. There is an open selection policy, and participation in the programme is voluntary. There is no financial cost to participants, which is an important principle of *El Sistema*. At commencement of this year’s programme, there were 84 students enrolled in Cohort 1 (2011 intake) and 113 students in Cohort 2 (2012 intake). A pool of tutors is selected for the programme based on their musical
knowledge and skill, and teaching experience, although not all tutors are necessarily string players.

All students and their whānau, and tutors that attended particular sessions were invited to take part in the evaluation. Tables 1 and 2 indicate the number of participants who consented to be observed and/or to complete questionnaires.

Table 1

<table>
<thead>
<tr>
<th>Cohort</th>
<th>N children observed (General Musicianship)</th>
<th>N children observed (String Playing)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cohort 1</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Cohort 2</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

Table 2

<table>
<thead>
<tr>
<th>Cohort</th>
<th>N tutors observed</th>
<th>N tutor questionnaire responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cohort 1 and 2 intakes</td>
<td>5</td>
<td>3</td>
</tr>
</tbody>
</table>

2.3 Measures and Analysis

Data collection used a mixture of methods including:

1. Student observations

2. Tutor observations

3. Observations of performances

4. Programme documentation

5. Tutor questionnaires
2.3.1 Student Observations

Ten students in their second year in the *Sistema Aotearoa* programme (Cohort 1) and three students in their first year of the programme (Cohort 2), as well as adult members of their whānau consented to participate in the evaluation. The imbalance of numbers of participants was largely due to lack of contact opportunities between whānau and the researcher, with Cohort 2 students attending fewer sessions. In one of the sessions with the Cohort 1 students, the researcher was formally introduced to those whanāu members in attendance, which impacted on the number of responses. The students were observed during normal sessions and during performances to evaluate both general musicianship and string playing skills. Two separate observation sheets were used.

A semi-structured observation schedule (refer Appendix B) was developed to assess some key musicianship skills of individual students while participating in group activities. The musicianship skills to be evaluated were determined by the learning focus of the programme, and by the researcher’s working knowledge of music education at the level of the students. The students were observed at various times, in a variety of settings over ten observations. Evaluating individual performance in an ensemble setting was challenging, but important in order to keep the context authentic. The same observation schedule was used to record anecdotal notes relating to general impressions of the whole group’s performance in each of the two cohorts. The process involved filling in a schedule with the notes in a running record type fashion. Retrospective analysis after each observation meant that an incremental process was used to check and refine themes.

An experienced string-player, also a classroom teacher, was consulted, and two design sessions were used to develop an evaluative performance rubric, which was used to evaluate string playing skills of individual students while participating in group activities. It was important that the person selected to be involved had a good knowledge of string instruments, and also a good knowledge of appropriate pedagogical practices with groups of children in this age group.

2.3.2 Tutor Observations

An observation schedule was developed (refer Appendix C) in order to gain information about aspects of pedagogy and learning content implemented by tutors in the programme. The broad themes used in the schedule were selected by the researcher, based on knowledge and experience of working with groups of children in music education settings. The schedule was
semi-structured to avoid making assumptions about what could or should be included in the sessions. The purpose of the observations was to look for patterns in content and delivery, rather than to evaluate the calibre of individual tutors. The five tutors who consented to participate in the observations were observed for approximately twenty minutes each, at various times over the ten observation sessions.

2.3.3 Observations of Performances

Two live performances were observed. The first performance was held at the Auckland Philharmonia Orchestra open day on 11 November 2012, and involved a representative group of students. The second performance was held at the Telstra Clear Pacific Events Centre on the 21 November 2012, and involved all 180 students. Additionally, all available video-recorded performances and Auckland Philharmonia Orchestra website documentary video clips were viewed by researchers for overall impressions. Anecdotal notes were recorded while observing live and recorded performances.

2.3.4 Programme Documentation

Staff provided researchers with copies of programme documentation, which included planning and programme notes for students in both cohorts and for holiday programmes. Blank copies of students’ workbooks were included.

2.3.5 Tutor Questionnaires

A questionnaire was developed (refer Appendix D) which included six open-ended questions relating to the evaluation questions. The questions were informed by previous evaluations such as the ‘Reading Together’ evaluation, and consideration was given to aspects of the research goals where data could enhance the evaluation. This was a team design, and questions were developed and refined after receiving feedback from the Programme Director of Sistema Aotearoa. Three tutors completed their questionnaires and returned them, and relevant data gleaned from the responses is integrated into appropriate sections of the report.

2.4 Analysis
Data from observations of individual students’ musicianship skills and string-playing skills were analysed and quantified, to identify patterns, trends, and variations between students in Cohort 1 and Cohort 2. Anecdotal notes arising from tutor observations, observations of performances, analysis of programme documentation, and tutor questionnaires were sifted through several times. From this process, broad themes emerged, which formed the basis of the structure of this report. In addition, overall impressions provided further anecdotal data.
3. Results

Results are reported in two sections, in response to the two main evaluation questions:

1. What patterns of musical development do students in the Sistema Aotearoa trial programme show?

2. What are the specific features of the Sistema Aotearoa trial programme that contribute to learning in music?

3.1 What Patterns of Musical Development do Students Show?

In any instrumental teaching and learning programme, there is skill development particular to the instrument being learned, alongside the development of general musicianship skills and understandings that are transferrable to other music contexts. While the skills and knowledge pertaining to each are complementary, the music outcomes of the Sistema Aotearoa trial programme are reported in terms of musical development for general musicianship and for orchestral string-playing skills, which are evaluated separately. This is followed by a summary of emerging patterns of differentiation between the year one and year two cohorts, and connections to the New Zealand Curriculum (MoE, 2007).

3.1.1 Student Observations: General Musicianship

One of the key principles of El Sistema is learning in a group context, in which individual students operate both independently and collaboratively, and are members of a “musical community of practice” (Barone & Bresler, 2006, p. 2). The dynamic and integrated nature of music elements within the context of songs and pieces means that it is difficult to measure competency of an individual student at any given point. However, it is important to evaluate the performance of individuals in the group setting to retain the integrity of the learning context (NEMP, 2008). Over a series of ten observations, anecdotal notes were recorded on observation schedules for individual students. This is likened to a series of ‘snapshots’ that build up an overall informed impression of students’ capabilities.
Table 3
*Summary of Data Gathered from Observations of Individual Students: General Musicianship*

<table>
<thead>
<tr>
<th>Learning Focus</th>
<th>Indicative Behaviours</th>
<th>Cohort 2 (three students)</th>
<th>Cohort 1 (ten students)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Listening with increasing focus</td>
<td>Instructions are followed promptly and accurately.</td>
<td>All three students showed signs of some degree of focussed listening during observations.</td>
<td>All ten students showed signs of focussed listening during observations.</td>
</tr>
<tr>
<td></td>
<td>Instructions are carried out independently without having to follow others’ lead.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maintaining a steady beat while playing and/or singing</td>
<td>Movements and actions are synchronised with the underlying pulse of the music.</td>
<td>All three students maintained a steady beat while being observed playing and/or singing most of the time, although there was evidence of speeding up, particularly when other parts were playing.</td>
<td>All ten students clearly and consistently maintained a steady beat while being observed playing and/or singing.</td>
</tr>
<tr>
<td>Playing with rhythmic accuracy, in unison and when other parts are played</td>
<td>Note-values are interpreted and played accurately, and in time with the beat.</td>
<td>All three students played with a degree of rhythmic accuracy while playing in unison.</td>
<td>All ten students played rhythm patterns accurately and in time with the beat, while playing in unison and in parts</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Two students clearly found it challenging when playing in parts, particularly when observing rests.</td>
<td></td>
</tr>
<tr>
<td>Following a music score and gestures of a conductor while playing</td>
<td>Eye contact is made with the music score and/or the conductor.</td>
<td>Following a music score is not applicable to this cohort.</td>
<td>All ten students had music scores clearly visible while playing, and made visual connection when less familiar pieces were played.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>All three students followed the conductor’s lead.</td>
<td>All ten students followed the conductor’s lead.</td>
</tr>
</tbody>
</table>
**Table 4**  
*Summary of Data Gathered from General Observations of Large Groups: General Musicianship*

<table>
<thead>
<tr>
<th>Learning Focus</th>
<th>Indicative Behaviours</th>
<th>Cohort 2 (three students)</th>
<th>Cohort 1 (ten students)</th>
</tr>
</thead>
</table>
| Listening with increasing focus | Instructions are followed promptly and accurately.  
Instructions are carried out independently without having to follow others’ lead. | Students showed varying degrees of focussed listening, although attention spans were limited in some cases. | In general, students showed a greater degree of focussed listening.                       |
| Maintaining a steady beat while playing and/or singing | Movements and actions are synchronised with the underlying pulse of the music. | In general, the majority of students maintained a steady beat most of the time while playing and/or singing. | In general, students consistently demonstrated a strong feeling of beat while playing and/or singing. |
| Playing with rhythmic accuracy, in unison and when other parts are played | Note-values are interpreted and played accurately, and in time with the beat. | In general, the majority of students played with varying degrees of rhythm accuracy and control. | In general, a greater number of students played with rhythm accuracy and control.          |
| Following a music score and gestures of a conductor while playing | Eye contact is made with the music score and/or the conductor. | Following a music score is not applicable to this cohort. | In general, a greater number of students made direct eye contact with the music score while playing. |
| Singing confidently and expressively, with accurate pitch and rhythm | Singing is in tune and is rhythmically accurate. Participation is enthusiastic and confident. | Although individual singing performance is difficult to evaluate in a large group, it is important to note that students in both cohorts demonstrated confident, tuneful and rhythmical singing.  
The students demonstrated competency in singing rounds and partner songs, and in singing in a range of languages, including Māori and Polish. | |
In terms of general musicianship, it is impossible to ascertain how much student achievement may be attributed to new learning arising from involvement in the programme, or to the musical capital students bring that have been acquired through life experiences. However, differences between the outcomes for each of the cohorts indicate progress, particularly with regard to focussed listening and rhythmic control when playing partner songs and rounds. It is difficult to draw conclusions regarding students’ ability to following a music score while playing. Considering the context of the observations, it could be assumed that the pieces being practiced in preparation for concerts were familiar to the students, and many of the pieces would have been memorised at the time of the observations.

3.1.2 Student Observations: String Playing

3.1.2.1 Mastery of instruments

A rubric of basic string playing skills was used to assess children’s achievement on ‘cello and violin. Refer to Appendix E for the string-playing rubric.

Table 5

*Summary of Data Gathered from General Observations of Large Groups: General Musicianship*

<table>
<thead>
<tr>
<th>Skill Focus</th>
<th>Indicative Behaviours</th>
<th>Cohort 2 (three students)</th>
<th>Cohort 1 (ten students)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Posture</td>
<td>Students sit upright at the edge of the chair with feet flat on the floor. Instrument is held correctly.</td>
<td>All three students occasionally sat upright with correct instrument hold, but not consistently.</td>
<td>Five students sat upright with correct instrument hold consistently throughout the observations.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Five students demonstrated correct posture most of the time.</td>
<td>Five students demonstrated correct left hand position consistently.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Five students demonstrated correct left hand some of the time, but not consistently.</td>
</tr>
<tr>
<td>Left hand position</td>
<td>Elbow, arms and fingers are in correct position.</td>
<td>All three students occasionally demonstrated correct left hand position, but not consistently.</td>
<td></td>
</tr>
<tr>
<td>Right hand</td>
<td>Demonstrates correct bow-hold.</td>
<td>All three students demonstrated correct bow-hold occasionally throughout the observations, but not</td>
<td>Eight students demonstrated correct bow hold consistently throughout the observations.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
During the observed sessions, tutors consistently drew attention to particular aspects of technique such as posture and body position, or bow-hold. Data gathered from the observation rubrics and analysis of planning documentation indicate a strong connection between the teaching goals determined for each session, the teaching focus, and students’ performance.

Some aspects of technique, such as correct left hand position, were less consistent across the cohorts. There was clearly a variation in tone production, with those in Cohort 1 able to produce a better tone by applying varying pressure to each of the strings. Good bow positioning on the strings was evident in both groups, but it was noted during observations of Cohort 2 that a number of violin bows were not tightened. While attention to technique is essential for accurate and musical playing, one tutor commented: “By not over-emphasising precise technique at first, they developed an enthusiasm and confidence in playing.”

Repertoire is carefully selected to develop particular skills and techniques. In the first year programme, the focus is on playing open strings, and there was impressive progress to the playing fingered melodies and confidence in crossing strings for students in the second year of
programme (Cohort 1). Students are given opportunities to imitate rhythm patterns on one or two open strings. Booth (2009) points out that children in the early stages of the work with a single note for some time, enabling the children to develop a sense of quality sound. Imitation is a fundamental way of learning and research has shown that, from a very young age, students have considerable capacities for imitation (Barone & Bresler, 2006). Correct fingering was assisted by use of stickers, and by the conductor and supporting tutors modelling fingering during ensemble playing sessions. All the students were familiar and confident with bowing direction, and this added a strong visual element to performances. The routine of setting instruments in correct position prior to playing was practiced consistently in every observed session.

The language pertaining to string playing used in the programme is inclusive and age-appropriate, contributing to a sense of fun and playfulness while learning important technical skills (AUT, 2012). Examples include:

- Best bow-hold
- Bendy thumb
- Curly pinky
- Gentle like a baby
- Bow press-ups
- Skinniest string
- You have two ears – one for yourself and one for the person next to you

The practice of ‘singing the fingering’ acts as a mnemonic device, enabling children to internalise correct playing technique. One tutor commented that this practice “is a very efficient and effective way for children to learn and memorise tunes by ear. Most children have really picked up on this and now learn new tunes very quickly.”

3.1.2.2 Care and knowledge of instruments

Instruments are well cared-for by students and tutors. Tutors ensured that instruments were accurately tuned before each session commenced. The emphasis on care of instruments is considered fundamental to El Sistema – it is “an ongoing imperative, given the tremendous need for instruments and the chronic shortage of new ones” (Tunstall, 2012, p. 29). The use of cardboard cutout instruments in the first year of the programme teaches the student how to care for an instrument, how playing it feels, and it prepares them to handle their first real instrument later (Booth, 2009). The transition from cardboard-cutouts to ‘real’ instruments acts as a source
of motivation, and is designed to allow students to get “a feel for excellence in their own hands” (Booth, 2009, p. 79). The careful and confident handling of instruments was evident in performance as well as in regular sessions.

3.1.2.3 Choice of instruments

The majority of students play violins, with a smaller group on ‘cellos. This is largely due to availability of instruments and is based on personal choice, rather than a developmental transition. Occasionally, students elect to swap from violin to ‘cello, or vice-versa. They are given a six week trial period where they play both instruments before making a final choice. Booth (2009) noticed similar practices in his investigation: “Kids can pick and change instruments, but shifting is taken seriously and not done casually” (p. 79).

3.1.3 Differentiation between Cohort 1 and Cohort 2 Students

Although data gathered from individual observations is limited in terms of imbalance of numbers in each cohort and the context of the learning, the combination of this information together with general observations, viewing of live and recorded performances, tutor questionnaires and analysis of documentation show indication of learning progress. Students’ ability to execute important general musicianship skills such as, playing in time and playing in parts are developed through application in new learning contexts, with expert guidance and support.

There are factors that may contribute to differentiation, including age and maturation. Another consideration is that students in Cohort 2 are in the process of acclimatising to the after school programme. One tutor commented: “I have noticed the speed of musical learning progression increase as the children’s behavior became more aligned with the Sistema way.” Another tutor pointed out that the first year in the programme is earlier in the day, which could impact on students’ energy levels and focus. However, in comparison with students in Cohort 2, those in Cohort 1 showed greater proficiency in the following areas:

1. Increased listening focus
2. Greater rhythmic control, particularly when playing in parts
3. Greater focus on following the conductor’s lead
4. More consistent technique with all aspects of string playing

5. Increment of theoretical concepts as evidenced in the workbooks completed in holiday programmes (although completed workbooks were not available for analysis, the tasks themselves are at a more sophisticated level in the year two programme).

3.1.4 Links to the New Zealand Curriculum

The AUT report (2012) recommended: “Sistema Aotearoa seeks to pursue closer and more visible alignment with school curricula and learning competencies in partnership with the schools” (p. 105).

The New Zealand Curriculum (MoE, 2007) identifies achievement objectives in music that are based on broad learning progressions in each of four interrelated strands: Understanding in Context; Developing Practical Knowledge; Developing Ideas; Communicating and Interpreting. While specific progress indicators are not stated in the curriculum, the achievement objectives represent some indication of “progress towards broader outcomes that ultimately amount to deeper learning” (MoE, 2007, p. 39). The descriptive, rather than prescriptive, wording for each of the achievement objectives allows for a degree of interpretation, encompassing a range of music learning opportunities in schools and in communities, allowing programmes to retain their integrity while working towards a shared national vision of developing students’ music literacy. Traditionally, ‘music literacy’ has been interpreted as ability to read and write music using conventional notation, but a more contemporary definition is “the ability to communicate and interpret meaning” in music (MoE, 2000, p. 10).

The New Zealand Curriculum (MoE, 2007) promotes principles of assessment rather than specific strategies and performance indicators. Assessment of children’s learning and progress is largely based on teachers’ own judgements, with benchmarks for assessment determined by particular contexts and purposes. For example, the Associated Board of the Royal Schools of Music and Trinity College of London have developed their own situated curricula and success criteria that meet their particular needs. This section explores how involvement in the Sistema Aotearoa trial programme contributes to students’ learning in relation to each of the curriculum strands, followed by a discussion relating to effective pedagogy, as outlined in the New Zealand Curriculum (MoE, 2007).
3.1.5 Achievement Objectives and *Sistema Aotearoa*

The Music Sound-Arts achievement objectives defined in the New Zealand Curriculum are presented in eight levels, ranging from year one to year thirteen. Typically, the year two and year three students involved in the *Sistema Aotearoa* trial programme would be operating at levels one and two of the curriculum. The achievement objectives for students’ first six years of school are shown in Table 6.
<table>
<thead>
<tr>
<th>Level</th>
<th>Understanding in Context</th>
<th>Developing Practical Knowledge</th>
<th>Developing Ideas</th>
<th>Communicating and Interpreting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level One</td>
<td>Students will:</td>
<td>Students will:</td>
<td>Students will:</td>
<td>Students will:</td>
</tr>
<tr>
<td></td>
<td>explore and share ideas about music from a range of sound environments and recognise that music serves a variety of purposes in their lives and in their communities</td>
<td>explore how sound is made as they listen and respond to the elements of music: beat, rhythm, pitch, tempo, dynamics and tone colour</td>
<td>explore and express sounds and musical ideas, drawing on personal experience, listening and imagination</td>
<td>share music-making with others</td>
</tr>
<tr>
<td>Level Two</td>
<td>explore and share ideas about music from a range of sound environments and recognise that music serves a variety of purposes in their lives and in their communities</td>
<td>explore how sound is made and changed as they listen and respond to the elements of music: and structural devices</td>
<td>improvise, explore and express musical ideas, drawing on personal experience, listening and imagination</td>
<td>respond to live and recorded music</td>
</tr>
<tr>
<td>Level Three</td>
<td>identify and describe characteristics of music associated with a range of sound environments, in relation to historical, social and cultural contexts</td>
<td>explore and identify how sound is made and changed as they listen and respond to music, and apply knowledge of the elements of music, structural devices and technologies</td>
<td>express and shape musical ideas, using musical elements, instruments, and technologies in response to sources of motivation</td>
<td>share music-making with others, using basic performance skills and techniques</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>represent sound and musical ideas in a variety of ways</td>
<td>respond to live and recorded music</td>
</tr>
</tbody>
</table>

**Table 6**

*Music Sound-Arts Achievement Objectives*
The Developing Practical Knowledge strand is concerned with the development of music understandings and skills leading to music literacy, through exploration and response to the elements and expressive qualities of music (MoE, 2000). Listening is fundamental to all aspects of music learning and promotes “the processing of acoustical information in the environment and in training the ear to hear nuances of sound” (Brown & Lamb, 2004; Purdy, 2011).

One of the impressive features of the Sistema Aotearoa trial programme evidenced in teaching practices and in planning documentation is the underlying concern for development of music understandings alongside practical skills, and the development of aural skills and sensitivity through focused listening. This was evidenced in a number of ways, including tutors’ use of rich music vocabulary through regular, contextualised exposure to music terminology such as tempo, rhythm, pitch and texture. During one observed session, the concept of texture was discussed in relation to the singing and playing of partner songs and rounds, described as “playing one tune on top of another” and “building up layers one by one.” Regular use of such meta-language while listening, playing and singing enables children to develop an applied understanding of the underlying concepts, building awareness and generalisability of important music understandings through direct application.

Another example of the development of generalised music understandings is the use of rhythmic time names such as ta ta tiki tiki, and speech patterns and catch-phrases to enable children to say, sing and play particular rhythm patterns. For example, fish and chips and ice-cream is a memorable pattern that introduces quaver and crotchet patterns, and ha is a soft sound that is used to represent rests. Not only do these strategies for introducing rhythm patterns have appeal, they also develop rhythmic awareness and are believed to influence the way children internalise rhythm (Perret & Fox, 2004; Sposet, 2008). Colley (1987) found that “systems in which specific words were assigned to intact rhythm patterns improved performance and notation skills” (p. 221). Another effective practice observed is the singing of melodies before realising them on instruments, promoting good listening and memory skills, while developing a sense of phrasing and intonation. The singing of the tunes that are played is incorporated into performances using a play-sing-play structure. This rondo of playing and singing gives the pieces significance and interest.

As students played their instruments, music scores were visible, placed on shared music stands, and it was the responsibility of the owner of the folder to locate the music score for each piece as it was played. While the majority of students observed appeared to be playing from memory, this could be considered a natural part of the music reading process, just as it is with reading literacy, developing connections between sound and symbol (Barrett, 1997). The intention is to
ease children into using full standard notation, through sound pedagogical practices over a period of years in “such a natural way that there is an easy natural learning of the language, braided in seamlessly” (Booth, 2009, p. 79). Two tutors commented on the approach of introducing ‘sound before symbol’ as a distinct and positive contrast to other teaching contexts, where the reading of music notation is a learning priority. During one observation, children were asked to start playing at a designated bar of the piece, which they needed to find by connecting the tune and the rhythm with the music notation. Another strategy used to promote music reading skills was students working in pairs, with one partner pointing to the notes with the bow, while the other played. This is a good example of a peer-assisted learning strategy.

The Developing Ideas strand involves children’s original musical thoughts and ideas. The ensemble nature of El Sistema requires “artistic authenticity” (Booth, 2011, p. 25), and the emphasis is on recreating rather than creating music. This is an observation rather than a criticism. While improvisation and composition are important learning experiences in a student’s music education, coverage of curriculum strands is dependent upon the nature of the programme, and should not be contrived merely to tick boxes. Booth (2011) makes the point that “ensemble music and good instruction produce satisfactions and confidence that free exploration cannot” (p. 23). In saying that, it was noted on several occasions that individual children were given the opportunity to invent musical phrases on their instrument for others to imitate, and it appears that this is common practice in the programme.

The essence of the Communicating and Interpreting strand is the sharing of music-making, and reflection on own and others’ performances. Public performance is a central focus in the Sistema Aotearoa trial programme. Considering the age and level of the students in the programme, the performances were of a very high standard. The confidence and skill demonstrated by students was evident in all aspects of performance, not just in regard to musical and technical skill, but also in terms of performance protocols, such as entrances and exits, all executed with polish. These impressions concur with Booth’s (2009) comment relating to El Sistema performances: “I was astonished at the quality of the artistry at such a young age” (p. 80).

Another important aspect of the communicating and interpreting strand is viewing and reflecting on others’ performances. Although not directly observed, examination of documentation indicates that students are given opportunities to view performances by adult performers during holiday programmes. By viewing others’ performances, “students experience different interpretations of the musical performance and become inspired to try out different interpretations in their own playing” (Barone & Bresler, 2006, p. 6). It would be good practice for children to view their own performances and critically reflect on them. Although the students
are young, critical reflection and goal-setting are commonly practiced at all levels in New Zealand schools.

The Understanding in Context strand promotes depth of understanding of the distinct functions of music in society and the artistic heritage of music from a range of contexts. The importance of this strand is often overlooked in school music programmes, yet is considered to be “at the heart of music education are the actions of personal and social participation in making and responding to music for a variety of purposes and occasions” (NEMP, 2008, p.10).

The Programme Director of the Sistema Aotearoa provided contextual background of the pieces played, which was shared in class with the students and with audiences during performance. This knowledge about the music being shared added depth, interest and artistry to the performances. Green (2006) talks of the importance of providing opportunities for students to be exposed to a wealth of musical styles and the “social, cultural, political and ideological meanings that music carries” (p. 115).

3.1.6 Effective Pedagogy

Quality learning is dependent on quality teaching, and is focused on student achievement, including social outcomes (Alton-Lee, 2003, p. 1). The New Zealand Curriculum statement (MoE, 2007) identifies seven criteria, or teacher actions, that are believed to have positive impact on students’ learning:

1. Creating a supportive learning environment

2. Encouraging reflective thought and action

3. Enhancing the relevance of new learning

4. Facilitating shared learning

5. Making connections to prior learning and experience

6. Providing sufficient opportunities to learn

7. Teaching as inquiry
These criteria have been adapted to suit a music education context in a resource for music educators entitled “Effective Pedagogy in Music” (Grainger, Ikitau-Samu, Locke, & Winder, 2011). They provide a useful framework for examining the effectiveness of Sistema Aotearoa for music learning in more depth.

### 3.1.6.1 Creating a supportive learning environment

The practices and interactions of staff, students and whānau in the programme ensure that learning is maximised in a caring and nurturing learning environment that reflects the shared values of:

- **whakawhanaumatanga** – working together to reflect the community’s values
- **manaakitanga** – caring for and respecting each other
- **atawhai** – working together to nurture the students
- **mahi ngātahi** – working collaboratively (MoE, 2009, p. 15)

Group sessions are used to build community and cohesion and to recognise group and individual achievement. This sense of community is central to the spirit of El Sistema, according to Booth (2011), and he quotes Dr. Abreu, founder of El Sistema, as speaking of the orchestra “as a model of effective, almost ideal, community” (p. 22). A tutor also commented: “The strong sense of community creates a great environment for both tutors and students.”

Children are given opportunities to contribute to the learning through choice of songs and pieces to play, and are clearly “visible members of the learning community” (MoE, 2007, p. 34). The flexible nature of the grouping from session to session ensures that children get to know the different tutors and students involved in the programme. One tutor commented that “the system of rotating teachers from lesson to lesson very effective for learning.”

### 3.1.6.2 Encouraging reflective thought and action

There was some evidence of questioning, and clarification of learning focus that encouraged students’ reflective thought, although this aspect of the programme could be developed further. According to Absolum (2006), research shows that there are important shifts for students when they know what they are learning and the path towards it is very clear. For students to take more
responsibility for their own learning, there needs to be clarity for both teacher and students about what is being learnt, and what students need to do in order to achieve the learning.

3.1.6.3 Enhancing the relevance of new learning
The programme offers hands-on music-making opportunities that are incremental and differentiated to meet individual and group needs. There is a “clear progression pathway with practical landmarks and rewards” (AUT, 2012, p. 26). Most of the learning is embedded in active and relevant music-making contexts and differentiated learning opportunities are evident in both planning and practice. The varied repertoire of songs and pieces gives students opportunities to be curious about and to engage with material drawn from a range of musical styles and periods. Contextual background information is provided, which enables the children to see the relevance of what they are learning.

3.1.6.4 Facilitating shared learning
The flexible grouping in the programme gives opportunities for children to build partnerships with each other and with different tutors involved in the programme. This allows children to build confidence, and to learn from each other and there is evidence of peer support. There are opportunities for children to perform with tutors and guests. To develop more of a sense of “learning community”, the child’s voice could play a stronger role in the context of “learning conversations” as they “build the language that they need to take their learning further” MoE, 2007, p. 34).

3.1.6.5 Making connections to prior learning and experience
The carefully planned, incremental nature of the programme enables children to integrate new learning with what they already know and can do. There is a good balance between the new and the familiar, and repetition of known pieces increases understanding and depth. The intensity of the programme allows ample opportunity for children to engage with new learning and to reinforce previous learning, in a spiral nature.

3.1.6.6 Providing sufficient opportunities to learn
Students should have “sufficient and appropriate opportunities for practice and application” (Alton Lee, 2003, p. 2). Opportunities are provided for students to perform both within and outside the local community, giving students opportunities to use familiar material in new contexts, while pursuing excellence in performance, an important feature of El Sistema (Majno, 2012). The programme is intensive, with three sessions per week over a six week period each term and a one week holiday course during each school break. This regularity and intensity of
the programme are important features of Sistema Aotearoa and “a sustained pace goes hand in hand with the tenets of discipline and commitment” (Majno, 2012, p. 58).

3.1.6.7 Teaching as inquiry
Effective pedagogy involves teachers inquiring into the impact of their teaching on students’ learning, a practice that involves assessment and reflection (MoE, 2007). Both planning and practice in Sistema Aotearoa show evidence of reflective teaching, although it is difficult to determine who makes decisions regarding prioritised outcomes and changes. The teaching team meets prior to each teaching session to review the programme for the day, and this provides useful opportunities for teachers to have some input into the teaching and learning cycle.

3.2 What are the Specific Features that Contribute to Learning in Music?

While the previous section relates to the impact of the programme on students’ learning, this section discusses further the programme approach, programme content, programme implementation, performance opportunities, assessment, motivation and relationships with schools.

3.2.1 Programme Approach

While, on the surface, Sistema Aotearoa may be viewed as a programme of instruction, there are aspects that reflect Vgotsky’s theory of social constructivism (Krause, Bochner, Duchesne & McMaugh, 2010), where social group interaction and collective group learning are important aspects of the programme, and are built into the organisation. While the AUT report (2012) describes the programme as adopting a “routined, disciplined, consistent and structured approach” (p. 27), there is also a high degree of adaptability in structure and grouping, to meet particular needs of students. The holistic and flexible approach of Sistema Aotearoa allows for a wide range of values, skills, and behaviours to be developed (AUT, 2012) where students learn to communicate musically with increasing sophistication, laying an important foundation for lifelong enjoyment and participation in music (MoE, 2007).

Some literature discusses the influence of various music methodologies and approaches such as Kodaly, Suzuki, Dalcroze and Orff-Schulwerk on El Sistema programmes (Booth, 2009; Majno,
2012). Observations of Sistema Aotearoa showed that there was evidence of practices such as use of solfege and spoken rhythm patterns, but these techniques are not exclusive to any one methodology, and should be regarded as tools that act as effective means to music ends. While there is little value in making in-depth comparisons with other music education programmes, one distinct feature of El Sistema that distinguishes it from most other instrumental programmes is the ensemble approach. Ensemble playing is considered to be an “efficient multiplier of energies and resources” as well as means of promoting good listening skills (Majno, 2012, p. 58). A tutor commented: “children really seem to enjoy the ability to contribute to harmonies and layers of sound in an ensemble setting while playing a unique part.”

3.2.2 Programme Content

The programme is incremental, building on existing skills and understandings that increase in sophistication, demonstrating a strong correlation between developmental learning cycles of students and task cycles that lead to progression (Alton-Lee, 2003; AUT, 2012). Sessions are designed to give students a sense of both success and challenge, with a good balance of familiar and new material.

An important aspect of the content of any music programme is the choice of repertoire, which provides a framework for learning and teaching. Developing a core repertoire is useful in “creating technical and musical goals for teachers” (Murphy et al., 2011, p. 295). Internationally, El Sistema repertoire is predominantly drawn from classical music, but includes a variety of musical styles, and Booth (2011) describes it as a “many-kinds-of-music programme” (p. 19). Pieces are selected with specific pedagogical goals in mind, taking into account the skill and interest levels of the children, while providing opportunities for students to practice particular skills, such as crossing strings, producing a drone effect, and playing pentatonic rounds to explore texture and harmony.

While it might be argued that children should have experiences of instruction that are drawn from “cultural contexts in which the students have been socialised” (Alton-Lee, 2003, p. 2), one of the fundamental aims of the programme is to provide children with opportunities to experience a broad range of music, much of which may well be unfamiliar. Booth (2011) claims that “the truly radical promise of El Sistema is that it invites a rediscovery of the purposes and processes of classical music” (p.17). Jorgensen (2003) believes that western classical music has been marginalised in music education programmes because it has acquired a “negative connotation as a bastion of elitism and privilege” (p. 130). By making the relevance of particular
pieces of music transparent, “classical music is demystified for children” (AUT, p. 27). Green (2006) also argues that stylistic familiarity may develop through repeated listenings, which in turn may promote positive experiences of inherent meaning.

3.2.2.1 Programme implementation

*Sistema Aotearoa* sessions are carefully planned, with meticulous attention to organisational detail. Before each session commences, there is a group meeting involving tutors, Programme Director and key support people, during which roles are designated and the session outline is distributed and reviewed. There is opportunity for tutors to seek clarification and to raise any concerns. This is an example of a collaborative, reflective team approach, also noted in the AUT report (2012).

All after-school sessions and holiday programmes are held at the Otara Music Arts Centre, which is central to the Otara area, and close to all seven schools from where students are drawn. When students arrive at the centre, they are given colour-coded lanyards and their instruments, with name tags, are placed in a designated area, ready for tuning. Drinks and snacks are provided for the students, and there is time allocated for social interaction with other students and with tutors before the session commences. One tutor commented on the value of this part of the session in getting to know the children.

Each session is divided into three parts comprising group sessions, a choir session, then another group session. This structure adds interest, variety, and different groupings for interaction. In each session, the ‘cello players have an opportunity to work together, and with the whole ensemble. During the choir sessions, children sing a range of songs, including *waiata*, and also some of the playing repertoire. At the end of each choir session, an individual student is given an opportunity to choose a favourite song for everyone to sing. The singing component serves a number of purposes, including internalisation of pieces to be played, and opportunity to develop aural, rhythmic and melodic skills and understandings through song. The singing component “gets them working in ensembles from day one, learning to stay in tune, working co-operatively and developing control of musical variables” (Booth, 2009, p. 79).

Examination of the planning data indicates that each session is carefully structured in a lesson plan format, and includes opportunities for warm-ups, revision of familiar material, introduction of new material, and a choice of song at the conclusion of the session. There are specific teaching objectives identified, as well as teaching notes and reminders for tutors. Some of the
teaching goals relate more to learning experiences and activities than the actual learning, and may benefit from being expressed as ‘learning intentions’.

A part of the third session of each week will often feature a games focus. For example, during one observed session, the children were divided into teams for a ‘relay’ rhythm patterns and put melodic notation of strings in order from highest to lowest, working in pairs. The children clearly enjoyed these activities which provided a sense of fun, while reinforcing valuable learning.

Every opportunity to practise music skills is maximised. Use of sung echoes using a minor third interval, often referred to as ‘the child’s natural chant’, helps to develop tonal literacy (Manins, 2001). Examples include echo chants such as listening, not talking or musical ‘conversations’ such as Are you listening? Yes we are. There was also evidence of children singing while putting their instruments away, which could be considered to be an effective and enjoyable management tool.

Tutors and assistants in the programme execute a range of roles and are deemed to be “highly competent and specialised staff” (AUT, 2012, p. 26). As well as tutors who direct groups, there are ‘sweepers’ who offer support and help students to stay focussed and play their instruments during sessions. As Booth (2009) also observed, “tutors are right there to correct mistakes” (p. 80). Data show a strong correlation between teaching goals and session content, and a consistency in delivery. One tutor commented: “There is a standardised teaching method and language so that information is presented in a consistent way.” This standardisation is particular to Sistema Aotearoa, and is an example of a local adaptation.

While all three tutors’ questionnaires indicated that they experienced challenges with behaviour management, there was evidence of some effective management practices, such as role modelling, use of non-verbal instructions, and specific and positive feedback that focus on the facilitation of learning rather than purely emphasising compliant behaviour, considered by Alton-Lee (2003) to be indicative of good teaching practice. The discourses used by tutors in their teaching is derived from their own personal learning and teaching experiences and from models provided by the Programme Director. For tutors who are not experienced in working with large groups, adaptation may be necessary to implement management strategies.
3.2.2.2 Performance opportunities

Performance gives a music programme a ‘transparency’ and a public profile (Barone & Bresler, 2006, p. 5). Observations and documentation indicate that performance opportunities are an important feature of Sistema Aotearoa and all students were given opportunities to perform in both small and large groups, sometimes at “prestigious events” (tutor questionnaire response). Booth (2009) claims that by giving students many opportunities to play to audiences, performing and practice appear similar, thus reducing performance anxiety, and offering “evident demonstrations of personal competence and a group’s mastery of difficult challenges” (Booth, 2011, p. 23). The students in Sistema Aotearoa are clearly comfortable being observed visitors and whānau during group sessions, and there are strict protocols for visitors to follow in order to reduce the degree of distraction.

Preparation for performance is clearly an important part of the learning process in the Sistema Aotearoa trial programme, despite Majno’s (2012) caution that care should be taken to avoid turning the programme into a “performance machine”, more concerned with impressive performances than with in-depth learning (p. 60). Performances could be considered to be examples of “curriculum enactment” with real life relevance (Alton-Lee, 2003, p.2), and allow children to “experience a strong sense of belonging to something bigger as well as individual success” (AUT, 2012, p. 27). “Concerts are a way of making all the hard work meaningful” (Barone & Bresler, 2006, p. 11), and this was evident in the performances observed.

3.2.3 Assessment

Assessment is an integral component of Sistema Aotearoa, described in the AUT report (2012) as “structured holistic individual child progress monitoring system based on direct student assessment encompassing musical, personal and social competencies” (p. 113). Ongoing formative assessment was evident during the observed sessions, with adaptations made to session plans in order to accommodate particular needs. The assessment information gathered during sessions informs the planning for subsequent sessions. There was no specific evidence of students’ self-assessment practices during the observed sessions, inclusion of which could enhance students’ awareness of their own learning.

An example of a summative assessment practice used in the programme is the ‘instrument license test’, which is an individual evaluation of the student’s ability to look after an instrument, more than a test of playing ability. This is an individual test that checks the child’s knowledge of parts of the instrument, some basic skills such as bow-hold, as well as routines for
care. Individual students are assessed when they have deemed to show commitment and progress, and may be awarded a ‘full instrument license’ which is presented at one of the sessions. This allows the student to take an instrument home after each session.

3.2.4 Motivation

While socio-cultural outcomes are the primary goal of all El Sistema programmes, children’s early musical experiences should be “enjoyable and cognitively satisfying if they were to lay a foundation for students’ continued participation in music activities throughout their lives” (Murphy et al., 2011, p. 294). This is evident in the Sistema Aotearoa where learning is reinforced through positive and specific feedback to groups and individuals, building a personal sense of accomplishment. There is clearly a strong emphasis on intrinsic motivation, considered good practice for promoting sustained learning (Alton-Lee, 2003). This was also commented on in the recent AUT report: “Participation in music education is also thought to create an intrinsic motivation through allowing students to experience success, develop pride in their own development and thus increase willingness-to-try and willingness-to-learn” (AUT, 2012, p. 42). This concurs with the Sistema Aotearoa Programme Director’s comment that the rewards of involvement in the programme are intangible (personal communication), such as performance opportunities, without which, there may be a tendency for students to lose motivation. The desire to learn could be strengthened even further by involving the students in self-assessment practices, where take ownership of their own learning.

Personal motivation has a positive influence on attendance and retention. There was a 69% retention rate from the beginning of Term 2, 2011, to the end of Term 3, 2012 (AUT, 2012.) This is impressive, considering the nature and intensity of the programme, the age of the students, and the transient nature of whānau in the community. Booth (2009) also noted similar trends in his investigation: “Attendance is reportedly not an issue – students want to be there, and certainly the sense of responsibility to the group… and the teacher is part of the motivation” (p. 79). In a similar vein, one tutor commented: “Kids want to be there because they really want to play music.”

3.2.5 Relationships with Schools

The students in the programme are drawn from seven local schools in Otara. Initially, all the sessions for the new intake take place during school time, at each of the schools. This not only allows tutors to work with smaller groups earlier in the day at the initial stages of the
The programme, it also raises awareness of *Sistema Aotearoa*, and enables principals, classroom teachers and other interested parties the opportunity to find out more about the programme. Tutors speak positively about their relationships with schools. The AUT evaluation (2012) reports that teachers in participating schools are “engaged and supportive” (p. 27) and that there are “effective relationships and systems established with school principals and administration” (p. 28). Members of participating schools are invited to attend *Sistema Aotearoa* performances, and in 2012, a representative group of students performed in a special recital for Camilla, the Duchess of Cornwall, at one of the participating schools. The programme provides opportunities for students to form friendships with students and whānau from other local schools. Given the early stages of the trial programme, relationships between the programme and schools appear to be well established, and as the programme continues to grow, there is potential to strengthen connections even further.
4. Recommendations

Overall, Sistema Aotearoa offers students quality learning in music, with enjoyment and engagement, in a safe, nurturing environment. In addition to the transformative benefits of involvement in the programme reported by AUT (2012), it is clear that the music skills and understandings developed in the programme provide young children with a solid foundation for musical growth, both in terms of string playing, general musicianship, and ensemble playing, while retaining the integrity of El Sistema and raising community awareness. Therefore, our main recommendation concurs with that of the AUT report (2012):

1. That all parties involved should endeavour to ensure the continuation and sustainability of Sistema Aotearoa (AUT, 2012, p. 106).

Our other recommendations that might enhance the existing programme:

2. The trial period of the programme and two evaluations will provide useful feedback to stakeholders involved in Sistema Aotearoa to develop written guidelines to ensure that all those involved share a common understanding of what the programme is setting out to achieve, and what is expected of their involvement. This could include a programme overview, and rubrics of learning stages to clarify teaching and learning goals. By consulting various stakeholders, including whānau, schools, tutors, helpers, and Auckland Philharmonia Orchestra, they “are more likely to develop a sense of ownership and ensure programme sustainability if they are empowered to contribute to the development and future directions of the programme” (Murphy et al., 2011, p. 298).

3. Provide students with a stronger sense of involvement in the learning-teaching process through by adopting a more metacognitive approach. Metacognitive awareness is like a ‘seventh sense’ that successful learners consciously and unconsciously apply to their learning and helps them understand and respond to the question: What do I need to get better at? (Alton-Lee, 2003; Nisbet and Shucksmith, 1986). This might be manifested in a number of ways such as focusing on ‘learning intentions’ rather than ‘teaching goals’. While modelling and teaching are essential for “acquisition of skills and knowledge of the craft” (Barone & Bresler, 2006, p. 3), a shift in focus from the tutor’s intentions to what the student perceives to be of value could promote ownership and transparency of learning. Opportunities for students to reflect on their learning could be incorporated into regular sessions and holiday courses, and there could be opportunities for students
to critique their own group performances. “Forming critical judgements about the technical and expressive qualities of musical performance requires knowledge of how music works” (NEMP 2008, p.11).

4. There is an increasing number of schools that are adopting systems such as ‘knowledge net’ where students, right from the beginning of their schooling, use online reflective learning journals, which might be a consideration in forward longer-term planning. This could lead towards the establishment of a learning community, where students, tutors, whānau, classroom teachers and possibly peer tutors, when the programme expands, have input into the learning process, including ‘next steps.’

5. The content of the programme is pedagogically appropriate and effective, designed to engage the students and to foster quality learning. Content could be further enhanced by:

- Considering ways to involve aspects of movement into the programme. As well as echo singing and call and response activities that are currently used as effective management tools, body percussion activities and action songs, to be sung during the choir session, would add an element of movement to the programme, which is pedagogically appropriate for this age group.

- Ensuring that the activities set out in the workbooks used in the holiday programmes have relevance for the students by having direct and meaningful links to other learning. There are some examples in the workbook, where learning activities are contextualised “in their musical completeness” (Nerland, 2007, p. 406), and this could be developed further.

- Continuing to develop playing and singing repertoire that reflects local cultures. It is evident that efforts have been made to provide students with a rich and varied repertoire of songs and pieces to play, and there is inclusion of *waiata* in the singing repertoire. While it is important for students to ‘expand their horizons’ as discussed earlier, inclusion of more New Zealand music would further enhance the unique identity of *Sistema Aotearoa*. The challenge is to select repertoire that the students are able to play. (An example to consider is the work of Hirini Melbourne. Some of his melodies are composed using three consecutive whole tones, which may be suitable).
References


Appendix A: Key Findings of “Evaluation of Sistema Aotearoa” (AUT, 2012)

Outcomes

- *Sistema Aotearoa* is making a valued contribution to children’s musical development, as well as development of positive values, skills and behaviours.
- Family members are proud of their children’s involvement in the programme, achievement, and discipline leading to self-belief.
- Schools report improved social skills and attitudes, and an understanding about children’s capabilities.
- *Sistema Aotearoa* is well recognised in both local and wider communities and is viewed as a great opportunity for children to learn, and is believed to break down existing social and cultural barriers within the local community, while raising the profile of Otara.
- There is good retention in the programme, and opportunities for volunteers to develop skills of their own.

Processes

*Sistema Aotearoa* is a variation of *El Sistema*, particularly influenced by models from Venezuela and Scotland. The programme is based on a group-learning model, with a foundation of child’s pedagogy. There are complex links to schools, local communities, and international networks.

- The approach is behavioural, with good role modelling of values, skills and behaviours in a positive and safe learning environment.
- The programme involves effective leadership, a high performing, diverse team, and there is provision of ongoing support and professional development for staff, including volunteers.
- Funding has been dependent on government funding and “ad hoc philanthropic donations” from supporters of the programme and is well-managed (AUT, 2012, p. 16). Continuation of the programme is dependent on an ongoing cycle of new intakes. The dropout rate is considered to be manageable.
- There is a complex network underpinning the programme. Careful steps have been taken to grow relationships with schools. There is no formal structural mechanism for involving parents in decision making processes.
Appendix B: Student Observation Tool (General Musicianship)

**Project:** Independent Evaluation of the music learning outcomes in the Sistema Aotearoa Programme

<table>
<thead>
<tr>
<th>Pedagogy</th>
<th>Learning Content</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Observation I</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Time:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Listening</td>
<td>Beat</td>
<td>Thinking</td>
</tr>
<tr>
<td>Playing</td>
<td>Rhythm</td>
<td>LST</td>
</tr>
<tr>
<td>Singing</td>
<td>Pitch</td>
<td>Managing self</td>
</tr>
<tr>
<td>Reading</td>
<td>Dynamics</td>
<td>Relating to others</td>
</tr>
<tr>
<td>Representing</td>
<td>Tempo</td>
<td>Participating &amp; contributing</td>
</tr>
<tr>
<td>Large Group</td>
<td>Tone Colour</td>
<td></td>
</tr>
</tbody>
</table>

| **Observation II** |                  |         |
| **Time:**        |                  |         |
| Listening        | Beat             | Thinking|
| Playing          | Rhythm           | LST     |
| Singing          | Pitch            | Managing self|
| Reading          | Dynamics         | Relating to others|
| Representing     | Tempo            | Participating & contributing|
| Large Group      | Tone Colour      |         |

APPROVED BY THE UNIVERSITY OF AUCKLAND HUMAN PARTICIPANTS ETHICS COMMITTEE on 19 OCTOBER 2012 for a period of 3 years, from 19 OCTOBER 2012 reference 8624
Appendix C: Tutor Observation Tool

Project: Independent Evaluation of the music learning outcomes in the Sistema Aotearoa Programme

<table>
<thead>
<tr>
<th>Teacher Code:</th>
<th>Cohort:</th>
<th>Date:</th>
<th>Observer:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Observation I</strong></td>
<td><strong>Pedagogy</strong></td>
<td></td>
<td><strong>Learning Content</strong></td>
</tr>
<tr>
<td></td>
<td>Organisational Practices (Comments)</td>
<td>Behaviour Management Strategies (Comments)</td>
<td>Feedback to students (Comments)</td>
</tr>
<tr>
<td>Time:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Differentiation/Setting:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individual</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small Group</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Large Group</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of students in the group:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grouped according to ability:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>YES NO</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

APPROVED BY THE UNIVERSITY OF AUCKLAND HUMAN PARTICIPANTS ETHICS COMMITTEE on 19 OCTOBER 2012 for a period of 3 years, from 19 OCTOBER 2012 reference 8624
Appendix D: Tutor Questionnaire about

*Sistema Aotearoa*

Project: Independent Evaluation of the music learning outcomes in the Sistema Aotearoa Programme

<table>
<thead>
<tr>
<th>Tutor Code</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Average number of hours per week employed to teach in the programme</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Length of time employed in the programme</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Music background, other teaching experience and/or music qualifications</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

**Instructions**

On the next three pages there are six questions about the programme. Please answer all questions.

1. What are the distinctive features of *Sistema Aotearoa* based on your experience of teaching and/or learning string instruments?

2. Are there aspects of the programme where you noticed significant progress in terms of children’s learning? Please comment.

3. Describe any particular teaching strategies that you have developed or adapted to foster children’s learning in Sistema Aotearoa.

4. Do you have any contact with the schools from which your students come? If so, please describe the nature of the contact and how you think that impacts on the children’s learning.

5(a). What do you perceive to be the role of whānau/caregivers within the programme?

5(b). What is your perception of the influence that whānau/caregiver involvement has on their children’s learning?

6. What have been the greatest challenges and/or rewards of teaching in Sistema Aotearoa?

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# Appendix E: String-Playing Rubric

Project: Independent Evaluation of the music learning outcomes in the Sistema Aotearoa Programme

<table>
<thead>
<tr>
<th>STUDENT CODE: COHORT:</th>
<th>Violin and ‘Cello Playing Assessment Rubric</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Posture</strong></td>
<td>Beginning</td>
</tr>
<tr>
<td></td>
<td>Needs to sit upright at the edge of the chair with feet flat. Needs to hold instrument correctly.</td>
</tr>
<tr>
<td></td>
<td>Emerging</td>
</tr>
<tr>
<td></td>
<td>Occasionally sits upright at the edge of the chair with feet flat. Instrument is occasionally held correctly.</td>
</tr>
<tr>
<td></td>
<td>Fair</td>
</tr>
<tr>
<td></td>
<td>Sits upright at the edge of the chair with feet flat most of the time. Instrument is held correctly most of the time.</td>
</tr>
<tr>
<td></td>
<td>Proficient</td>
</tr>
<tr>
<td></td>
<td>Frequently sits upright at the edge of the chair with feet flat. Frequently holds instrument correctly.</td>
</tr>
<tr>
<td></td>
<td>Excelling</td>
</tr>
<tr>
<td></td>
<td>Always sits upright at the edge of the chair with feet flat. Always holds instrument correctly.</td>
</tr>
<tr>
<td><strong>Left Hand Position</strong></td>
<td>Beginning</td>
</tr>
<tr>
<td></td>
<td>Needs to place elbow, arm and fingers in correct position.</td>
</tr>
<tr>
<td></td>
<td>Emerging</td>
</tr>
<tr>
<td></td>
<td>Occasionally has elbow, whole arm and fingers correctly positioned.</td>
</tr>
<tr>
<td></td>
<td>Fair</td>
</tr>
<tr>
<td></td>
<td>Has elbow, whole arm and fingers correctly positioned most of the time.</td>
</tr>
<tr>
<td></td>
<td>Proficient</td>
</tr>
<tr>
<td></td>
<td>Frequently has elbow, whole arm and fingers correctly positioned.</td>
</tr>
<tr>
<td></td>
<td>Excelling</td>
</tr>
<tr>
<td></td>
<td>Always has elbow, whole arm and fingers correctly positioned.</td>
</tr>
<tr>
<td><strong>Right Hand</strong></td>
<td>Beginning</td>
</tr>
<tr>
<td></td>
<td>Needs to demonstrate correct bow hold.</td>
</tr>
<tr>
<td></td>
<td>Emerging</td>
</tr>
<tr>
<td></td>
<td>Occasionally demonstrates correct bow hold.</td>
</tr>
<tr>
<td></td>
<td>Fair</td>
</tr>
<tr>
<td></td>
<td>Has correct bow hold most of the time.</td>
</tr>
<tr>
<td></td>
<td>Proficient</td>
</tr>
<tr>
<td></td>
<td>Frequently has correct bow hold.</td>
</tr>
<tr>
<td></td>
<td>Excelling</td>
</tr>
<tr>
<td></td>
<td>Always has correct bow hold.</td>
</tr>
<tr>
<td><strong>Bow Usage</strong></td>
<td>Beginning</td>
</tr>
<tr>
<td></td>
<td>Needs to place bow correctly. Needs to play with weight that produces consistent tone.</td>
</tr>
<tr>
<td></td>
<td>Emerging</td>
</tr>
<tr>
<td></td>
<td>Occasionally places bow correctly. Occasionaly plays with weight that produces consistent tone.</td>
</tr>
<tr>
<td></td>
<td>Fair</td>
</tr>
<tr>
<td></td>
<td>Places bow correctly most of the time. Plays with weight that produces consistent tone most of the time.</td>
</tr>
<tr>
<td></td>
<td>Proficient</td>
</tr>
<tr>
<td></td>
<td>Frequently places bow correctly. Frequently plays with weight that produces consistent tone.</td>
</tr>
<tr>
<td></td>
<td>Excelling</td>
</tr>
<tr>
<td></td>
<td>Always places bow correctly. Always plays with weight that produces consistent tone.</td>
</tr>
<tr>
<td><strong>Intonation</strong></td>
<td>Beginning</td>
</tr>
<tr>
<td></td>
<td>Needs to place fingers correctly and confidently.</td>
</tr>
<tr>
<td></td>
<td>Emerging</td>
</tr>
<tr>
<td></td>
<td>Occasionally fingers correctly and confidently.</td>
</tr>
<tr>
<td></td>
<td>Fair</td>
</tr>
<tr>
<td></td>
<td>Places fingers correctly and confidently most of the time.</td>
</tr>
<tr>
<td></td>
<td>Proficient</td>
</tr>
<tr>
<td></td>
<td>Frequently places fingers correctly and confidently.</td>
</tr>
<tr>
<td></td>
<td>Excelling</td>
</tr>
<tr>
<td></td>
<td>Always places fingers correctly and confidently.</td>
</tr>
<tr>
<td><strong>Instrument Knowledge</strong></td>
<td>Beginning</td>
</tr>
<tr>
<td></td>
<td>Needs to name the parts of the violin/cello correctly.</td>
</tr>
<tr>
<td></td>
<td>Emerging</td>
</tr>
<tr>
<td></td>
<td>Names some parts of the violin/cello correctly.</td>
</tr>
<tr>
<td></td>
<td>Fair</td>
</tr>
<tr>
<td></td>
<td>Names most parts of the violin/cello correctly.</td>
</tr>
<tr>
<td></td>
<td>Proficient</td>
</tr>
<tr>
<td></td>
<td>Names nearly all parts of the violin/cello correctly.</td>
</tr>
<tr>
<td></td>
<td>Excelling</td>
</tr>
<tr>
<td></td>
<td>Names all parts of the violin/cello correctly.</td>
</tr>
<tr>
<td><strong>Playing Strings</strong></td>
<td>Beginning</td>
</tr>
<tr>
<td></td>
<td>Needs to cross from one string to another fluently and confidently.</td>
</tr>
<tr>
<td></td>
<td>Emerging</td>
</tr>
<tr>
<td></td>
<td>Crosses from one string to another with some degree of fluency and confidence.</td>
</tr>
<tr>
<td></td>
<td>Fair</td>
</tr>
<tr>
<td></td>
<td>Crosses from one string to another with a good degree of fluency and confidence.</td>
</tr>
<tr>
<td></td>
<td>Proficient</td>
</tr>
<tr>
<td></td>
<td>Crosses from one string to another with a considerable degree of fluency and confidence.</td>
</tr>
</tbody>
</table>

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Appendix F: Researcher Biographies

Robyn Trinick
MEd; ATCL(piano); LTCL(MusEd); AdvDipTchg

Robyn was a generalist primary teacher for fifteen years, prior to becoming a lecturer in Primary and Early Childhood Music Education at the Auckland College of Education, a position she has held for over twenty years. The position was upheld when the College merged with the University of Auckland. Throughout the duration of her time in the tertiary education field, she has maintained strong links with schools, and still enjoys working with children and teachers in the community, particularly in South Auckland. She is an accompanist for the Auckland Primary Principals Association music festival, and is an active participant in local and international conferences and workshops. She has been involved with a number of key music education developments, including National Education Monitoring Project for assessment in music, development of the Arts Curriculum and a range of Ministry of Education music resources. Having recently completed her Master of Education, she is beginning to develop a research profile, and has had several papers published, as well as being a researcher in the recently completed “Reading Together” evaluation with Professor Stuart McNaughton and members of the Woolf Fisher research team. Her main interests in music education are in the fields of Māori music, music’s connection with language, and accessibility of music opportunities, particularly for students in low decile schools.

Professor Stuart McNaughton
PhD (Education); MA (Education); BA; GradTching

Stuart’s research interests are in literacy and language development. It includes developing concepts of teaching, learning and development within a model of socialization, which is applicable to informal and formal educational settings (including families). Associated with this is explaining cultural processes in teaching, learning and development. The programme involves systematic applications of these concepts to areas of educational concern, specifically literacy instruction and language acquisition, and the identification and testing of specific properties of instruction. A goal is to design robust and scalable procedures to enhance teaching, learning and development. The programme contributes also to the development of more effective and equitable education. In this strand of research, Stuart has designed an intervention model for schools which substantially raises literacy achievement, particularly for Māori and Pasifika children (The Learning Schools Model). This model is now being tested in research applications in Australia. In addition to specific instructional
procedures, recent work includes the development of assessment tools for language and literacy applicable to both English medium and Māori medium instruction in New Zealand, and in English medium instruction in other countries.

Amy Shanks
BA; Dip Tch (Primary)

Amy Shanks is of Scottish and Irish descent and is currently a teacher at Mangere Bridge Primary School. Amy has worked with children for 13 years in a variety of settings. She has been primary teaching for six years in NZ, England and Tanzania. Prior to primary teaching, Amy has taught violin and piano music tuition for five years privately and in group lessons. She also has run several out-of-school children’s programmes for seven years mostly in low socio economic areas. Amy’s musical background began when she was six years old and played violin. She spent most of her school years in chamber groups and youth orchestras, which included touring internationally. Amy is passionate about music education and its ability to engage and inspire all learners. She believes all children should have the opportunity to learn music.