

CRESCENDO: MUSIC EDUCATION PROGRAM

CASE STUDY (2015–2020)

WEST AUSTRALIAN
SYMPHONY ORCHESTRA

Acknowledgements

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WASO Crescendo Program is proudly supported



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'The biggest impact I have seen has been on the students.'

It really is the development of their confidence... The music lessons are very scaffolded and supported, the kids are happy to take a risk with their learning and if they make a mistake it is not a big deal in that WASO classroom. They are supported all the way... that confidence has transferred over into other learning areas.'

Karen Davey, Principal,
Medina Primary School

'I think the implementation of this program has been phenomenal.'

For my youngest daughter, she was very speech delayed when we started school and the advancement of her speech I feel through the singing and everything that gets done with the program has brought her forward in a whole other level ...'

Parent,
North Parmelia Primary School

'The most significant change is in the improved academic results...'

...and the reason I think those results have come about are the schools improvement program we've got complemented by Crescendo.'

Peter Elsegood, Principal,
North Parmelia Primary School

WELCOME

We all know that music has an immense power to bring people joy, bond communities together and improve wellbeing. Thankfully this is increasingly shaping Australian and international social policy considerations. Learning and participation in music, when introduced early in life, can have profound positive impacts on development and improve overall education outcomes. More broadly it can help to meet challenges associated with ageing, loneliness, chronic conditions and mental health. But not everyone can access the quality programs capable of delivering these positive outcomes.

Enriching lives through music is central to WASO's purpose and we provide life-changing community programs to many who are not able to ordinarily access their benefits. From young people in hospitals with special needs, to older residents of Nursing Homes and Aged Care settings, programs such as Music for the Ages, Hospital Orchestra Project (HOP), Harmony Music, WASO on the Road, and our extensive Education offering all provide demonstrable community benefit. So too does the subject of this case study; our flagship schools music education program Crescendo.

Play-based learning programs for young children, such as Crescendo, provide a strong basis for future success at school. Students engaging with and playing music have improved school attendance, accelerated learning, and more confidence to face challenges and create solutions. They are generally happier young people who are more connected with their community. And, happier young people grow up to be more resilient adults with brighter futures.

This case study was commissioned to mark a key milestone year for Crescendo, our first graduating classes in 2020, seven years after the program pilot. The report, prepared by the team at Culture Counts with supplied data collated since inception, advocates for the success of the program, confirms the short-term outcomes, and also signals for further work required to demonstrate the long-term benefit. The positive outcomes are clear, but there is more work to do.

This program, and its success, would not be possible without the community of people who have rallied behind it. On behalf of WASO I would particularly like to recognise the comradery and support of the Principals of Medina and North Parmelia Primary Schools, Karen Davey and Peter Elsegood and pay tribute to their tireless efforts integrating such a program across their schools.

Also many thanks go to the foundations and individuals who have provided an essential financial bedrock for us to deliver on these positive outcomes – without you this would not have been possible. And, a big applause for the WASO Community Engagement team, our teaching staff and musicians who have created a carefully layered program that is as supportive as it is inspirational.

Thank you for reading this report and joining us on this journey. We look forward to sharing the stories and outcomes of our next chapter with you

Paul Shannon, Chief Executive Officer, WASO

EXECUTIVE SUMMARY

In 2021, with six years' of survey data, WASO commissioned Culture Counts to generate an impact report for the Crescendo educational music program. This report confirmed that:

- The socio-economic disadvantage of the participating schools demonstrated a strong social need for programs like Crescendo that provide access to unique opportunities early in life that can meaningfully improve people's lives in the long term.
- The program was able to generate a sense of inclusion and belonging to the community-at-large, beyond those directly participating in the program.
- The program gave individual students confidence to speak up, define goals and take an active role in decision-making (personal agency¹), and this was likely to lead to greater academic performance.
- The WASO *Theory of Change* and *Logic Model* for the program clearly demonstrate links between music engagement / music performance and personal agency for participants.

Throughout the evaluation period, an average of 84% of parents that completed a survey agreed that the program inspired confidence among students. The benefits of long-term engagement are evident through parent support of the program, with only 48% of parents reporting the program as 'extremely relevant' to their child's overall education in 2015, growing to 72% by 2020.

Student satisfaction levels with the Crescendo program have also improved over time. 77% of students in 2015 reported a 'smiley face' result, compared to 86% in 2020. This demonstration of organisational and program learning on behalf of the WASO Crescendo team will further increase the long-term benefits the program is able to deliver.

With participants now entering high school, the opportunity exists to see the long-term educational impact of the program.

¹ Personal agency is the ability to initiate and direct actions towards the achievement of defined goals.

1 INTRODUCTION

1.1 Background

2020 marked a milestone in the WASO Crescendo music education program. The award-winning project, taking place in two WA primary schools, Medina Primary School and North Parmelia Primary School, sought to address social disadvantage and generate better outcomes for WA students through engagement in music-based education.

Culture Counts was commissioned to undertake an evaluation of the project that would contribute to improving and further supporting the Crescendo music-education program in the future.

This review is based on the analysis of data collected from 2015 to 2020. As demonstrated by Table 1, WASO launched a pilot of the Crescendo program in 2014, with the first full year of programming delivered in 2015.

Table 1: *Crescendo Program, 2014 to 2020*

YEAR	CLASSROOM MUSIC		VIOLIN		VIOLIN ENSEMBLE	
	YEAR LEVEL	# OF STUDENTS	YEAR LEVEL	# OF STUDENTS	YEAR LEVEL	# OF STUDENTS
2014	Pre-primary (PP) pilot, Term 4 only	50				
2015	PP	50				
2015	Year 1	190				
2016	PP-2	205				
2017	PP-3	272				
2018	PP-4	321	Year 4	50		
2019	PP-5	368	Year 4 & 5	64		
2020	PP-6	430	Year 4 - 6	119	Year 5 & 6 pilot, 3 sessions in Term 4	60
2021	PP-6	426	Year 4 - 6	160	Year 5 & 6	45

About the Crescendo Program

From little things, big things grow...

Crescendo was created by WASO and is now reaching 426 students in Kwinana. The only program of its kind in WA, Crescendo currently provides weekly classroom music lessons to all students from Pre-primary to Year 6 at two Kwinana schools - Medina Primary School and North Parmelia Primary School. Students in Years 4 to 6 are also receiving Violin lessons.

Inspired by the philosophy behind the Venezuelan El Sistema, WASO works with the Kwinana community to provide students with opportunities to develop confidence, resilience, emotional and social wellbeing. Staff and parents from both schools have reported on improved concentration, self-confidence, behaviour and enthusiasm for learning. Students regularly perform at school assemblies and in front of their peers and family members.

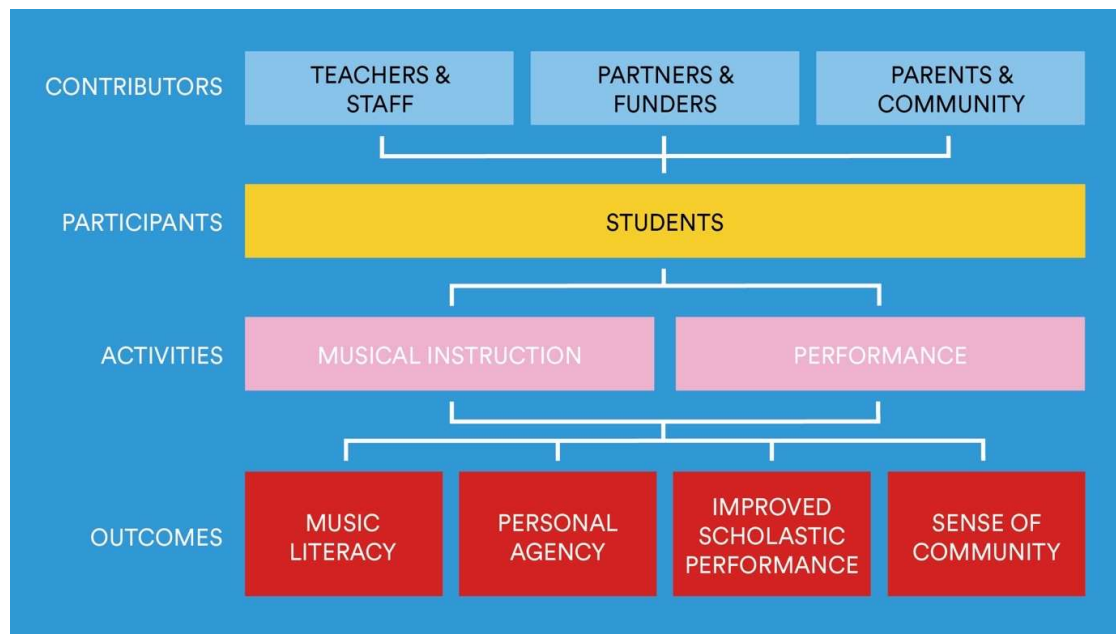
In addition to their weekly lesson, students also have the opportunity to attend WASO performances at Perth Concert Hall as part of Education Week, and enjoy a number of in-school performances from WASO musicians including the Education Chamber Orchestra (EChO) and local and international guest artists.

The Crescendo program and its delivery was proudly supported by Crown Resorts Foundation, Packer Family Foundation, Crescendo Giving Circle, Feilman Foundation, The Stan Perron Charitable Foundation, Tianqi Lithium Australia, Bunning Family and Government of Western Australia, Department of Education - Instrumental Music School Services.

Crescendo Theory of Change

The program uses a theory of change approach to bring students, teachers and parents together to learn and perform music in a way that generates personal agency for students, leading to better scholastic performance and an improved sense of community for participants and their parents. This theory of change is illustrated in Figure 1, below.

Figure 1: *Crescendo – Theory of Change Logic Model*



1.2 Existing Indicators

NAPLAN

The National Assessment Program - Literacy and Numeracy (NAPLAN) is an annual assessment for students in Years 3, 5, 7 and 9. NAPLAN is a nationwide measure that seeks to understand the development of literacy and numeracy skills in Australian students. Further information about NAPLAN and the research conducted as part of this evaluation can be found in Appendix 1.

NAPLAN results at both Kwinana schools participating in the program have improved over time and there is anecdotal evidence to suggest that Crescendo has made a meaningful contribution to this advancement. Correlating the success of Crescendo's implementation with NAPLAN scores has not been possible in this review. However, further investigation and refinements to the methodology of the Crescendo assessment may validate this hypothesis in the coming years.

Socio-Economic Indicators

Schools participating in the program, exist in areas of socio-economic disadvantage. SEIFA (Socio-economic Indexes for Areas) is a set of four indexes used to measure socio-economic conditions. Based on information collected from the five-yearly Census of Population and Housing conducted by the Australian Bureau of Statistics (ABS), the dataset consists of four indexes:

- The Index of Relative Socio-economic Disadvantage (IRSD)
- The Index of Relative Socio-economic Advantage and Disadvantage (IRSAD)
- The Index of Education and Occupation (IEO)
- The Index of Economic Resources (IER)

The ABS broadly defines relative socio-economic advantage and disadvantage in terms of people's access to material and social resources, and their ability to participate in society. While the Index of Relative Socio-economic Disadvantage (IRSD) provides a more general summary of relative socio-economic disadvantage, and the Index of Relative Socio-economic Advantage and Disadvantage (IRSAD) provides a more general summary of relative socio-economic advantage and disadvantage, it is the Index of Economic Resources (IER) and Index of Education and Occupation (IEO) that summarise important contributing factors of socio-economic disadvantage, those being variables related to the financial aspects and to the educational and occupational aspects of relative socio-economic advantage and disadvantage, respectively. In these cases, we can take to understand that financial resources and education/occupation play an important role in determining socio-economic disadvantage and are therefore important decisions within the context of meaningful intervention within a Theory of Change ².

Index data is available across five geographic types, as determined by the ABS. These geography types are:

- Statistical Area 1 (SA1)
- Statistical Area 2 (SA2)

- Local Government Area (LGA)
- Postcode (POA)
- State Suburb (SSC)

Only SA1 and SA2 are considered to be official ABS data structures. LGA, POA and SSC represent administrative areas for which the ABS is committed to providing a range of statistics, but can change regularly and are not defined by the ABS. This means that for interacting with other available datasets, as well as ensuring the confidentiality, accuracy and relevance of the data provided, use of ABS data structures are preferred for underpinning an intervention within a Theory of Change.³

The following figure highlights the socio-economic disadvantage of the areas participating schools were located in at the SA2 geography level.

Figure 2: IEO Socio-Economic Disadvantage (SEIFA 2016)

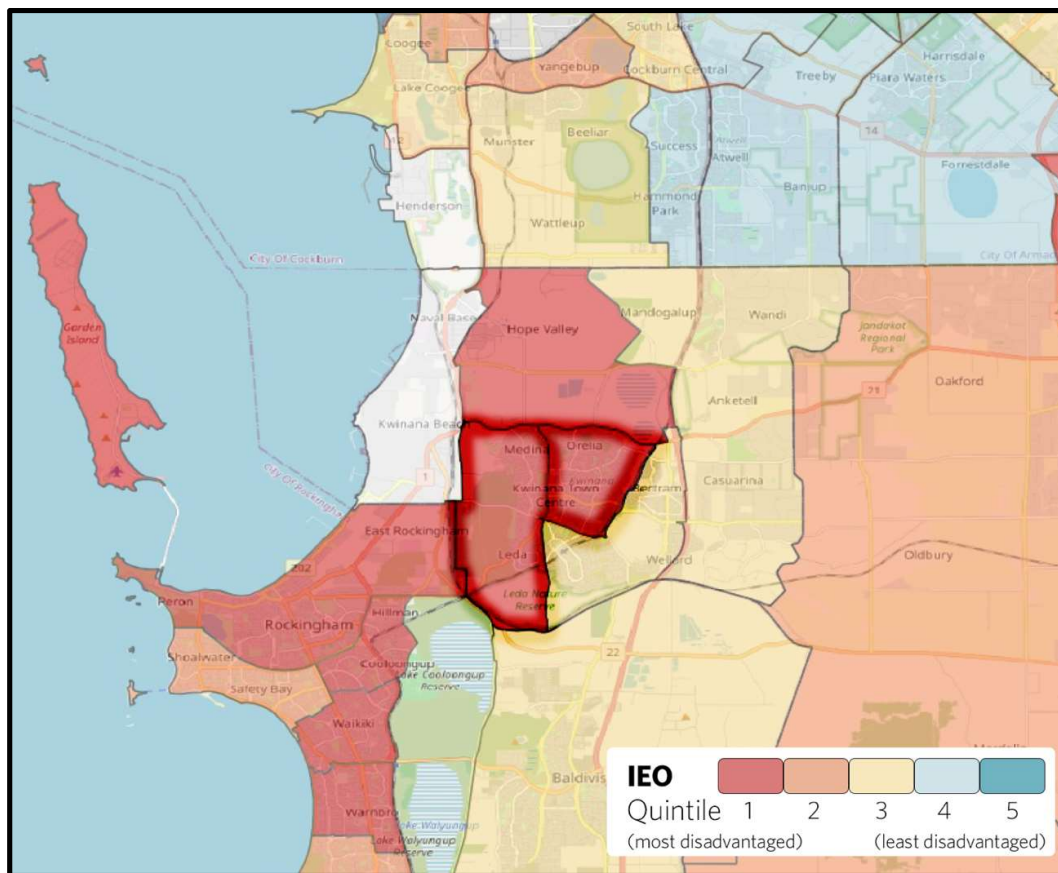


Table 2: Socio-Economic Disadvantage Results for Highlighted Areas

SA2 LOCATION	SEIFA
Medina	<ul style="list-style-type: none"> • Usual Resident Population: 10,959 • IRSD (Index of Relative Socio-economic Disadvantage) <ul style="list-style-type: none"> ○ Score: 910

³ Australian Bureau of Statistics, n.d. 'Australian Statistical Geography Standard (ASGS)'. Accessed 14 April 2021.
<https://www.abs.gov.au/websitedbs/D3310114.nsf/Home/Geography>

	<ul style="list-style-type: none"> ○ Quintile: 1 ○ Percentile: 12 • IEO (Index of Education and Occupation) <ul style="list-style-type: none"> ○ Score: 859 ○ Quintile: 1 ○ Percentile: 4
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Table 2: Socio-Economic Disadvantage Results for Highlighted Areas

SA2 LOCATION	SEIFA
Calista	<ul style="list-style-type: none"> • Usual Resident Population: 7,667 • IRSD (Index of Relative Socio-economic Disadvantage) <ul style="list-style-type: none"> ○ Score: 893 ○ Quintile: 1 ○ Percentile: 9 • IEO (Index of Education and Occupation) <ul style="list-style-type: none"> ○ Score: 868 ○ Quintile: 1 ○ Percentile: 5

Source: ABS (SEIFA 2016)

1.3 Evaluation Scope

From 2015 to 2020, WASO captured feedback from teachers and principals, students and parents who were involved in the Crescendo program through participating schools, Medina Primary School and North Parmelia Primary School. The results from these surveys are presented in this report.

Table 3 provides an overview of the scope of the evaluation including groups surveyed and the information captured. WASO used a combination of three survey instruments administered through email distribution. A total of 83 staff (teachers and principals) and 137 parent surveys were completed over the six years of evaluation. At the end of each term, participating students in all year groups were asked to indicate their 'happiness' with the program using a smiley face or sad face response. The survey instruments used as well as their response rates are presented in Table 4.

Table 3: Scope of the Evaluation

SURVEY GROUP	SURVEY INFORMATION
Teachers and Principals (Staff)	<ul style="list-style-type: none"> • WASO Crescendo Teaching Staff feedback • Benefit for students • Resource development feedback • Additional comments • Stories and testimonials
Students	<ul style="list-style-type: none"> • Happiness following class (asked via a simple smiley/sad face response) • Stories and testimonials

Parents	<ul style="list-style-type: none"> • Relevance to student's music experience • Student learnings • Additional comments • Stories and testimonials
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Table 4: Data Collection Summary

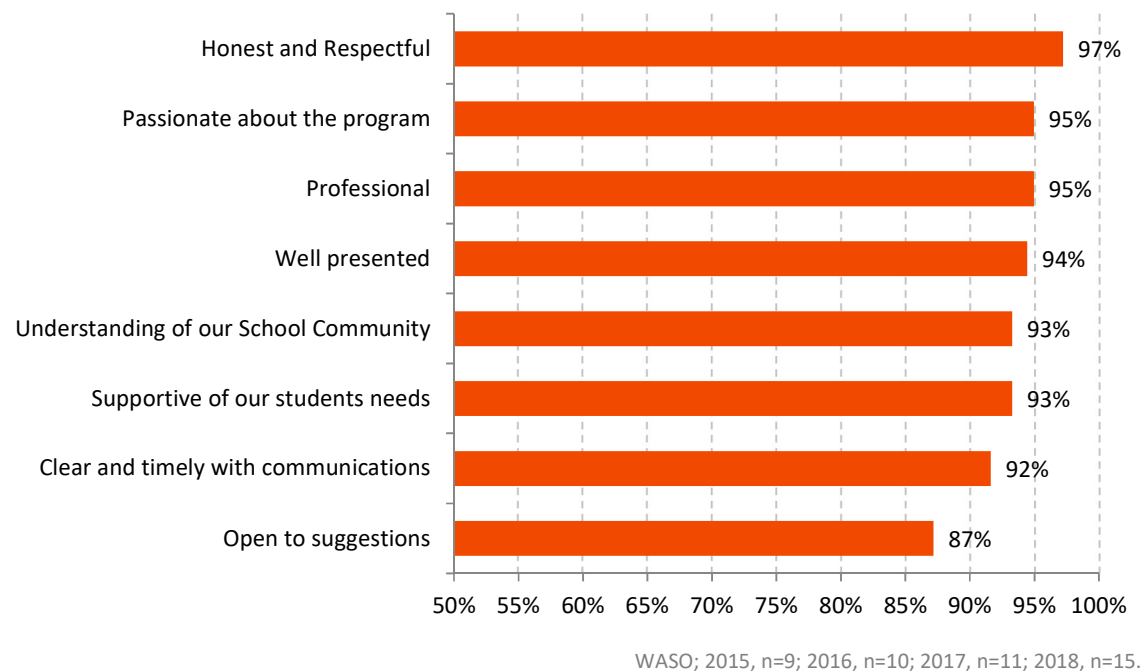
SURVEY NAME	SURVEY DETAILS	YEAR	TOTAL RESPONSES
Teachers and Principals (Staff)	<p>WASO distributed a survey to teachers and principals at participating schools at the end of each school year.</p> <p>In 2019 to 2020, this data was collected via Culture Counts survey platform. Data collected prior to this has been supplied by WASO.</p>	2015	9
		2016	10
		2017	12
		2018	15
		2019	21
		2020	16
Students	<p>Participating students at Medina Primary School and North Parmelia Primary School were asked to rate how happy they were after their participation in Crescendo programming, at the end of every term.</p> <p>All students from each year group were asked for their feedback however final sample sizes were not provided.</p>	All years 2015 to 2020	1,836
Parents	<p>WASO distributed a survey to the parents of student participants at the end of each school year.</p> <p>In 2019 to 2020, this data was collected via Culture Counts survey platform. Data collected prior to this has been supplied by WASO.</p>	2015	27
		2016	5
		2017	16
		2018	24
		2019	32
		2020	33

2 STAFF EVALUATION FINDINGS

This section of the report provides an overview of the findings from surveys administered to the principals and teachers working at schools participating in WASO's Crescendo Program; Medina Primary School and North Parmelia Primary School.

2.1 WASO Crescendo Teaching Staff Feedback

Figure 3: "Please provide feedback on WASO staff attributes, based on your interactions with individuals", aggregate 2015 to 2018



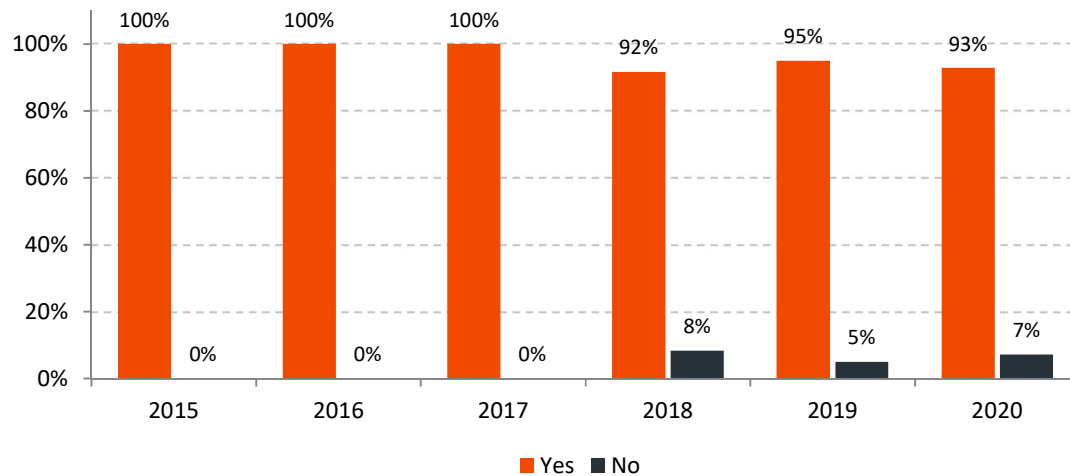
Insights

School teachers and principals were asked to provide feedback on WASO Crescendo Teaching Staff attributes based on their interactions throughout the year. This question was not asked as part of the 2019 and 2020 surveys and the chart displays the overall average of responses received from 2015 to 2018.

Overall, each attribute received an extremely positive response. The most frequently selected options included, 'Honest and Respectful', 'Passionate about the program', 'Professional' and 'Well presented'. 'Open to suggestions' was selected less frequently than the other options, however a response rate of 87% demonstrates most school staff agreed that WASO Crescendo Teaching Staff had this attribute.

2.2 Benefits for Particular Participants – Yes or No

Figure 4: Are there children at your school, who have particularly benefited from participation in WASO's Crescendo Program?



WASO; 2015, n=9; 2016, n=10; 2017, n=12; 2018, n=15; 2019, n=21; 2020, n=16.

Insights

Generally, most teachers and principals agree that there are children who have particularly benefited from participation in WASO's Crescendo program. More context to these responses was given in a follow up, text response question. These are summarised below in Section 2.3.

2.3 Benefits for Particular Participants – Comments

Respondents that indicated the Crescendo program did have benefits for particular children were asked to elaborate on their response. The key themes of these comments are highlighted in this section, followed by a selection of direct quotes taken from the Staff Survey from 2015 to 2020.

Key Themes:

- Students with behavioural issues and/or learning difficulties with the core curriculum (e.g. maths, literacy) participate in Crescendo enthusiastically.
- Teachers have seen introverted students' confidence increase with participation in the program.
- The Crescendo program creates a safe space for all students.
- Many (if not all) of the children participating in the program would not have had access to music education if it hadn't been for WASO.
- Teachers have observed social/emotional growth alongside the development of musical skills.

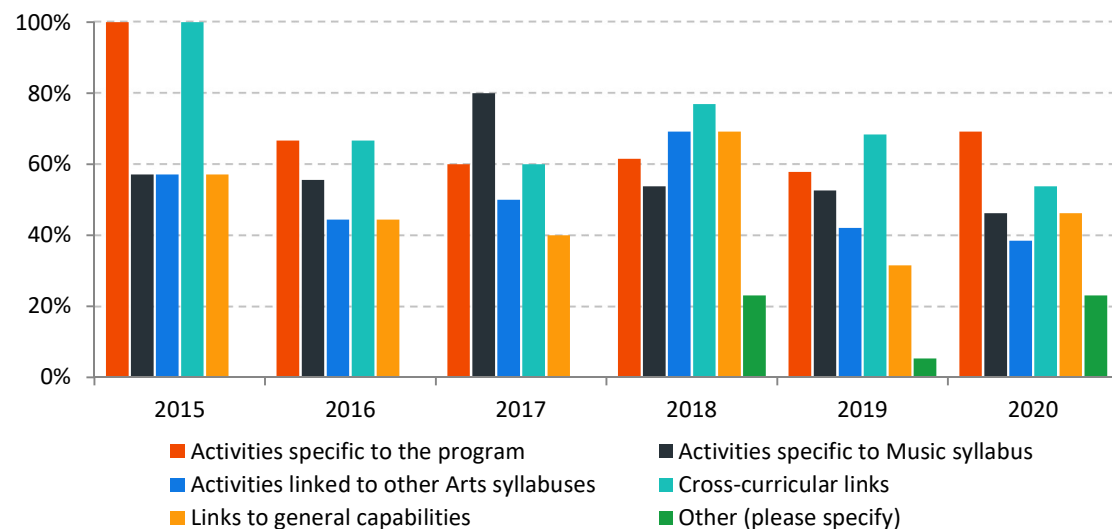
Direct Quotes:

- | *“Children who would not necessarily be exposed to music have had a positive experience. Many of our students would have very rarely seen or handled a musical instrument. Our school does not have a specialist music program so this exposure is a vital part of their learning.” (2015)*
- | *“Virtually all of the children that have participated have benefited. This is a low socio - economic area and this type of program that captivates the children is highly effective directly on artistic objectives but also in developing skills and understandings that are transferrable to the wider context in regards to teaching literacy, numeracy and social skills, which are our core responsibilities at NPPS.” (2015)*
- | *“Many of our students are socially disadvantaged and non-academic. The Crescendo Program allows our students to experience success in a way that directly impacts their self-esteem.” (2016)*
- | *“Students who are below their year level academically have had the opportunity to shine through performing during the WASO Crescendo program.” (2017)*
- | *“The Crescendo program helped to develop my student’s musical abilities but it also helped to improve their social skills, which have translated back to the classroom. Each session my students participate with enthusiasm, those students that are typically more shy have come out of their shell and have thrived in environment that encourages them to use their artistic abilities. They have been actively encouraged to use their imagination and learnt to work more collaboratively with their peers.” (2017)*
- | *“Children who lack confidence are encouraged to participate as part of a whole group and then given opportunities to participate as an individual. Because the environment is a safe and inclusive one, students feel they can take a risk and their confidence grows each time they participate.” (2018)*
- | *“This program has been a benefit to all children who would never of experienced an education in the art of music had it not of been for WASO. I have witness children, who are considered to be on the highest of the behaviour management scale, play violin and love it. I saw their enjoyment and pride when they performed and I even have Pre-Primary children saying how much they want to learn the violin. WASO have truly given the gift of music to the children and their families of North Parmelia Primary School and these children and their families will treasure that gift for the rest of their lives. The positive affect this music program has had on our school outweighs anything and everything that has been implemented in the school, at least for the 16 years I have been here anyway. Thank you from the bottom of my heart. I love this school and I love the kids and our families and I love what WASO has done for them all. The benefits for all are mind blowing!” (2018)*
- | *“My students who struggle in core subjects like literacy and numeracy have blossomed in the Music Crescendo program and are able to participate just as well as their peers which makes it a safe environment for them.” (2018)*
- | *“Students that haven’t engaged with other parts of the curriculum participate with enthusiasm.” (2019)*
- | *“Shy students reluctant to participate in singing, dancing and performing have blossomed into confident students fully participating in lessons and beyond.” (2020)*

“For some of our students their social/emotional growth has been extraordinary and part of this can be attributed to the WASO program. The development of their musical skills has also been impressive. WASO provides another forum for some of our students to experience success and to shine.” (2020)

2.4 Future Resource Development

Figure 5: What would your school community use if included in future resource development?



WASO; 2015, n=9; 2016, n=10; 2017, n=12; 2018, n=15; 2019, n=21; 2020, n=16.

Insights

The majority of Staff indicate that it would be useful for WASO to create school resources for ‘activities specific to the program’ (69%) however, the request for this item has decreased over the years indicating that this need may have been met in some way.

2.5 Additional Feedback

All survey respondents were given an opportunity to provide any additional comments and feedback at the end of the survey. A selection of direct quotes from this section are displayed below.

Direct Quotes:

- “We are incredibly grateful for the opportunity this program has provided to our students.” (2016)
- “As mentioned on many occasions, the benefits of this program are incredible. Crescendo has contributed to the improved results the school and the students are currently experiencing.” (2018)

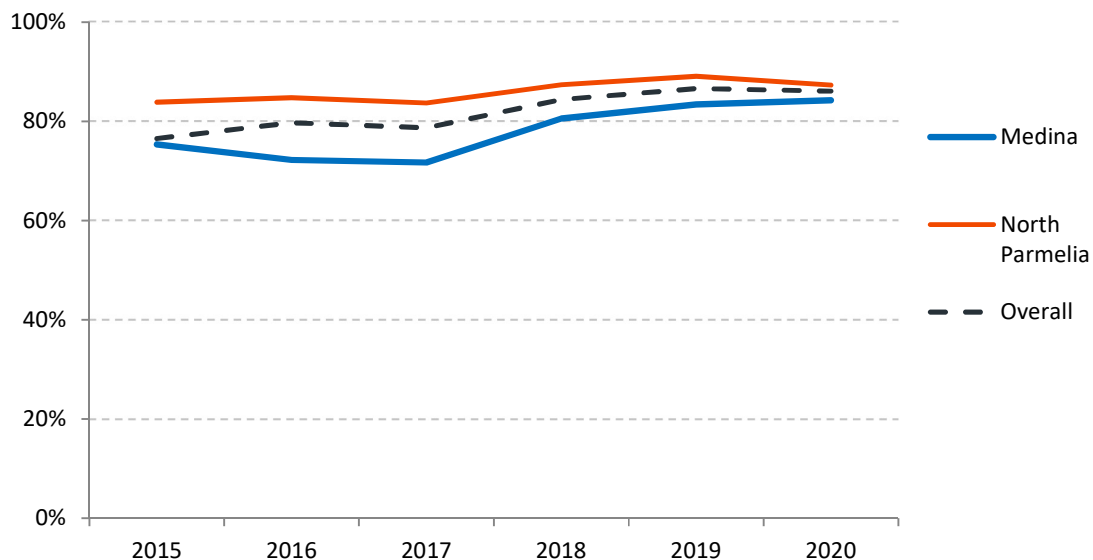
- | *“Crescendo is a sensational program at our school that offers innumerable benefits to the students and the school. Thank you!!!” (2020)*
- | *“Music should be just as important as Mathematics and English. Musically literate people make the world a more peaceful and intellectual place.” (2020)*

3 STUDENT EVALUATION FINDINGS

Following every Crescendo music class, students in all participating year groups – Pre Primary, Year 1, Year 2, Year 3, Year 4 and Year 5 – were asked to indicate if they were happy by selecting from a smiley face 😊 or sad face ☹ response option. The analysis of these findings represents the number of students that selected the smiley face option and were therefore satisfied with their experience.

3.1 Happiness Score Year on Year

Figure 6: *Percentage of students happy after Crescendo music class, 2015 to 2020*



Insights

The Crescendo program was received positively by students across all years of delivery. The results from both schools trended upwards over time with consistently outstanding results for students in Year 2 and above.

The key improvement from 2017-2018 and increased happiness in students years 4 to 6 is a result of the introduction of violin lessons. Students participating in violin lessons consistently exceeded 90% with their happiness score (at least 5 points higher than the average class), and this has helped to increase the overall average.

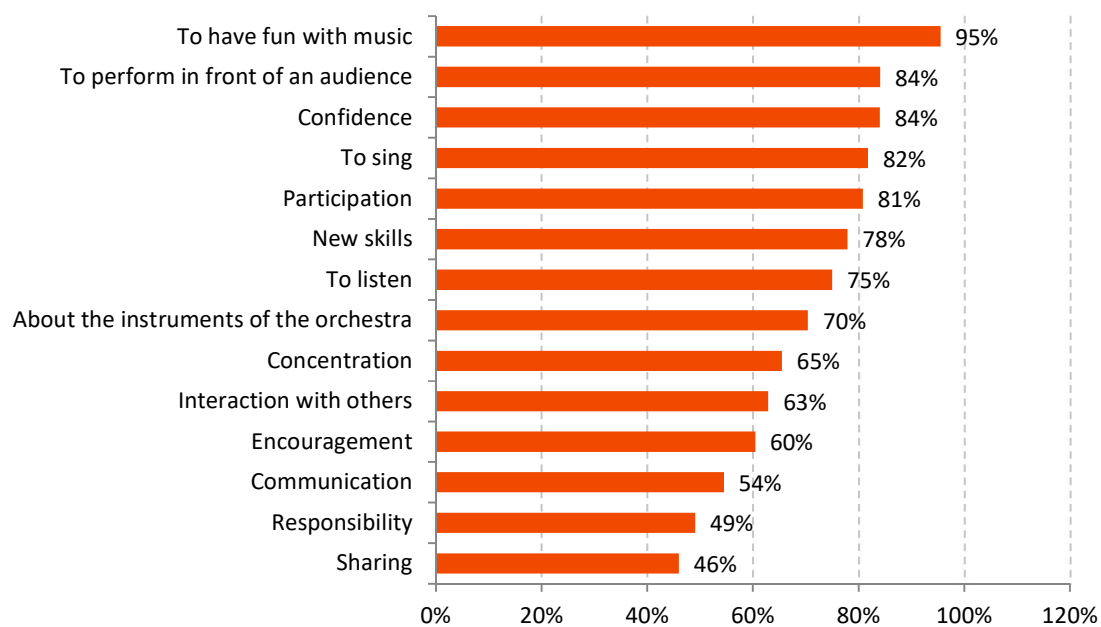
4 PARENT EVALUATION FINDINGS

This section of the report details the experience and perceptions of parents whose children participated in WASO's Crescendo Program at Medina Primary School and North Parmelia Primary School.

4.1 Program Learnings

Parents were asked to select words/phrases that they felt were most relevant to what their child had learned through participation in the Crescendo program. The following word cloud showcases the terms that were selected most frequently in response to this question, asked in all surveys from 2015 to 2020.

Figure 7: Words that are most relevant to the children's learnings (Average response rate, 2015 to 2020)



WASO; 2015 to 2020, n=122.

Figure 8: Words that are most relevant to the children's learnings (Frequency, 2015 to 2020)



Insights

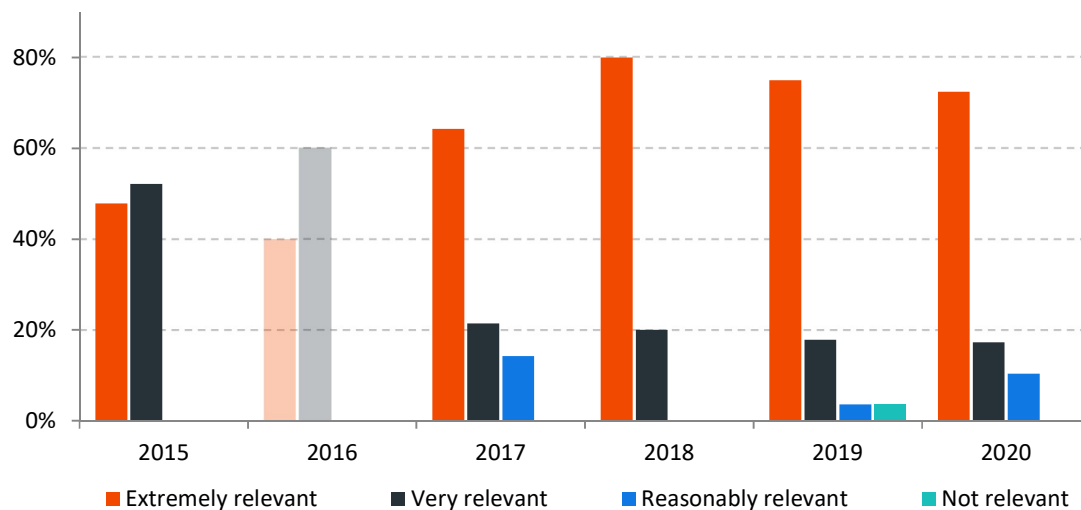
Parents were asked to select which words they felt were most relevant to their children's list. A total of 14 words and phrases were presented on the list and the average response rate to each (from 2015 to 2020) is illustrated in Figure 7. Parents were most likely to choose "to have fun with music" (95%), "to perform in front of an audience" (84%), "confidence" (84%), "to sing" (82%) and "participation" (81%).

The frequency of the word selection is illustrated in the word cloud visualisation, Figure 8.

4.2 Relevance to Student's Music Education

Respondents were asked to indicate how relevant the Crescendo program was to their children's music education.

Figure 9: How relevant to your students' music (or Arts in general) education is this program?



WASO; 2015, n=23; 2016, n=5*; 2017, n=14; 2018, n=25; 2019, n=28; 2020, n=29.

* Results from the 2016 evaluation have been faded due to the low sample size.

Insights

The proportion of parents that found the Crescendo program to be 'extremely relevant' to their children's education grew over the years, from 2015 to 2018. In 2019 and 2020, the highest proportion of respondents also selected this option however in these surveys, parents were slightly more likely to select the 'reasonably relevant' response option. Only 4% of respondents in 2019 felt the program was not relevant however this outcome was not repeated in the following year.

4.3 Participant Stories

As part of the survey, parents were asked, *“Is there anything in particular that you would like to share with us about your child/children’s participation in WASO’s Crescendo Program?”* The feedback received in response to this question from 2015 to 2020 has been summarised below.

Key Themes:

- Parents are grateful that the programs are offered through these schools, giving students access to musical education who otherwise might not be able to access it.
- Parents have observed many benefits of the program, including improved musical talent, more positive attitudes, reduced anxiety, and greater confidence.
- The students’ interest in music has transferred to their parents/families who are also learning and enjoying the program through their experience.

Direct Quotes:

| *“This is a wonderful program and I am so glad that my daughter will get to participate again in Year One. It offers a range of opportunities to these children that they would not normally have access to. The development of a love of music is a precious gift to give. Thank you!”* (2015)

| *“(My child’s) interest and abilities with music have grown considerably with her participation in this program. The ability to teach her these skills are not available at home, so without the WASO program she would have not learnt to enjoy music and performance. She regularly tells me things that I did not know about musical instruments, notes etc!!”* (2017)

| *“My son is speech delayed and has never been a big fan of music or singing, this program has made a HUGE change in his attitude to singing and music appreciation all for the better. I see greater confidence and he is now often the initiator of songs.”* (2018)

| *“We’ve loved hearing the songs sung at home and we often look them up so we can sing them together.”* (2018)

| *“Thank you for being an important part of my children’s journey in life, this program is adding to so much of their steps in life, that I personally could never show them.”* (2018)

| *“(My child) is a very anxious individual and this program has helped her to get out of her comfort zone.”* (2018)

| *“They really love it. So much so that they get upset if they happen to be ill that day and need to stay home.”* (2019)

| *“As a parent I believe the program is a wonderful opportunity for my son to learn how to play the violin and to have professional music lessons. I believe the performing arts are important in boosting children’s confidence and their creative abilities.”* (2019)

- | *"I have seen my son's confidence grow over the years he has been involved in the program. Every time I see him play the violin in front of an audience it brings a tear to my eye. I'm so proud of the musician he has become thanks to this amazing program." (2020)*

4.4 Additional Feedback

All survey respondents were given an opportunity to provide any additional comments and feedback at the end of the survey. A selection of direct quotes from this section are displayed below.

Direct Quotes:

- | *"it is very good program make my child confident." (2015)*
- | *"This is a great community engagement project that lends itself well to performances at Kwinana Cultural Centre by both professional groups and students alike." (2015)*
- | *"I wanted to say thank you for everything that you have done to the WASO students. My son loves it very much." (2016)*
- | *"Well done to WASO for reaching out into communities that would not normally be able to experience this type of learning - it is a very worthwhile initiative and demonstrates that a love of music is for everyone!" (2017)*
- | *"Both my daughters love music and it makes me happy that they are having fun learning." (2018)*
- | *"My 9-year-old just got his violin license which he is extremely excited about and hasn't yet begun learning, but he will. This is particularly positive as my son is ADHD and the concentration he demonstrates when discussing it helps direct him in the right manner." (2019)*
- | *"Can't praise it highly enough. Our school is so lucky to have this program and it's made such a positive impact on our children." (2019)*
- | *"As a parent I am so grateful that you provide our school with this opportunity to have this program. In the 3 years that my children have been participating their love of singing and music has grown. It's a fantastic program and run by wonderfully dedicated staff who are there for the benefit of the children." (2020)*
- | *"I hope you keep the program running as it is a beautiful way of introducing young ones to music." (2020)*

5 PARTICIPANT STORIES

Following their experience of the Crescendo program, participating artists, principals and teachers, as well as parents on behalf of participating students, were invited to provide a testimonial about the impact and benefits they'd observed as a result of the program. Each individual's sentiments have been summarised into one word that summarises the 'most significant change' – Academic, Socioemotional and Aspirational.

This section highlights the most significant changes summary, alongside a number of excerpts from these motivating stories.

5.1 Parent and Student Stories

Parent 1, North Parmelia Primary School

Most significant change summary: Aspirational and Socioemotional

- *"(My child) is only in Year 1, but going to the last few Crescendo concerts, I'm seeing kids there that are learning to play something like the violin that I think would never, ever have gotten that opportunity to learn, not only the violin but probably any musical instrument, at least at this age, so I think that's a positive thing for sure."*
- *"I started music education at an early age, so I could see what joy it's given me, and also there's been research out since I was a kid about having some musical literacy I suppose, especially with maths but I think recently it's come out that it's all sorts of academic performance. My sister is a music teacher and keeps espousing to me all the things about how music education is so valuable from an early age, and at her daughter's school she doesn't get anything like this so she's very excited by the program that my kids get to be a part of."*

Parent 2, North Parmelia Primary School

Most significant change summary: Socioemotional

- *"[My children's] experience with Crescendo is amazing. We are a music-orientated home anyway, but just in regards to singing. Even to see my young two, (children), grow, it's been huge for them – (child) with his speech and (child) with her confidence, it's been huge."*
- *"(My child) even came out after the concert that we had and said, 'I get to learn the violin next year.' I was like, 'I didn't even know you wanted to learn it.' And she's like, 'If I'm really good, I may be able to bring it home!' We couldn't get her to talk in kindergarten, to having that...it's huge. She's so confident enough to do that, I've just gone, wow. She was always really withdrawn."*
- *"My eldest (child), she did the program for a few years because she was part of it when it first came in but I think she only jumped in in Year 4 or something... To see where she's gone, she's Year 7 this year but she has gone into sound production at her school... (My child) has calmed a lot. My little boy is different. He's Year*

1, and he's very much had a lot of speech issues. He has a jaw setback. But I've found that music for him is more calming; he can calm himself down. It sort of soothes him to be able to concentrate."

Parent 3, North Parmelia Primary School

Most significant change summary: Socioemotional

- *"I think the Crescendo program has had an amazing significance within the community. I know other schools who would absolutely die to have a program like this being run in their school because it is just so fantastic."*
- *"For my youngest daughter, she was very speech delayed when we started school and the advancement in her speech I feel through the singing and everything that gets done with the program has brought her forward in a whole other level, that I don't think she would have gotten if she didn't have the songs to sing and the things to practice. I think the implementation of this program has been phenomenal for her, in her speech and being able to practice the sounds."*
- *"Also, it is very cute. I love Tuesdays, they are my favourite day because that is her music day. She comes home and she tells me all about the different instruments that they were learning about that day."*
- *"It has then given her the ability to speak better because she has had that practice in singing the repetitive songs, getting the words out properly, and having that confidence of the more she gets better in her speech the better she is with her singing and the more confident she is performing as well. I think for her, being part of the program has made her life so much better."*
- *"This was significant for us because we had been a part of speech therapy as well, but I think the music program and the singing provided her with that no pressure environment to be able to work on it."*

5.2 Teacher Stories

Teacher 1, Medina Primary School

Most significant change summary: Socioemotional

- *"One of the social things I really like in the program, with WASO, there's a lot of turn-taking and watching what the person before them is doing to keep up with their turns so they don't let the whole team down, so just becoming more aware of other people within the group and that need to be part of that group so that the whole group succeeds. "*
- *"Eye-opening experience, seeing the issues that emerge from music activities as potential processing disorders. Provides clues for diagnosis or changes in the methods behind what is happening with the kids. More evidence leads to deeper understanding."*
- *"I just think all of mankind is about a team. How can you go it alone? You can't if you don't have a clue of how to work with people in society, how do you exist? There's so much going on in our society at the moment that I just think there needs to be more awareness... It's our job now to help guide these people into adulthood, and some of the things we do now will carry with them through their whole lives. So this is where*

we can go now, 'hey, you're not here for yourself; you're actually part of a bigger team, and you've actually got to consider other people, their feelings, and just be aware of them in your society. I just think that's huge.

Teacher 2, North Parmelia Primary School

Most significant change summary: Academic and Socioemotional

- *"We have a child who is very low with his academic progress, very reluctant to participate in any activities requiring social interaction and speaking. I have seen throughout the year that he has become more confident to have a go and the tear breaking moment was seeing him at the concert (the Crescendo End of Year Concert), doing the movement to the exact precision and singing the songs with the other children, standing tall, being confident, coming up to me later and saying "did you see me sing? I was so proud, I was excited". Mum was up the back, I saw her and she had tears in her eyes because I think this is the first time she has seen her son participate fully."*
- *"That also goes out to the other children, it radiates out as they see him as part of the class and he was a part of their concert. He is joining in with the other children in activities. He was isolating himself, but now he comes on in and talks with them. Some people come past and ask "is that the same boy"? Huge for him to feel connected to the class."*
- *"I think this is a changing point in his future academic career. He may not be up there academically but he will still try. He is on track to become an independent learner."*

Teacher 3, North Parmelia Primary School

Most significant change summary: Academic

- *"Main change I have noticed has been to the students and their listening. This translates into other areas of learning. The students are good at listening for sounds and words. They are just really tuned in and their listening is very tuned in. It all helps. I have been really surprised with all of them"*

Teacher 4, Medina Primary School

Most significant change summary: Aspirational

- *"I've already seen children have this connection, even at this young level, with singing. One child in particular (child), has an amazing voice, a really tuneful voice, and he has thoroughly enjoyed it. Another child that has really poor language but he adores music and it's a way of expressing himself, and it's the only time I see him actively offering language because it's in a music format and it seems to work for him. It works in his brain, I don't know, but it seems to connect for him and he's able to sing the songs as opposed to in a classroom when you're reading and you're writing and you're just offering your thoughts. In a music format it's incredible. He just comes out of his shell. It's divine."*

Teacher 5, North Parmelia Primary School

Most significant change summary: Socioemotional

- *“What I’ve noticed from 2011 as I’ve come through the school to now – that’s eight years – I think it really is that confidence to put yourself out there and take a risk. It’s really taking a risk to perform, it’s taking a risk to get up and speak publicly and things like that. I think that’s probably the biggest [change] I’ve seen. To see kids get up and confidently play a violin, that was great to see.”*

Teacher 6, Medina Primary School

Most significant change summary: Socioemotional

- *“Confidence is the most significant. I love seeing our shy girls come out of their shells this year. We have a lot of students from different cultures this year, and it is a safe place for them. It is not reading and writing, they can all succeed in it, which has been brilliant and I love that it is inclusive of all cultures and you can use music from other cultures.”*

5.3 Principal Stories

Principal, North Parmelia Primary School

Most significant change summary: Academic

- *“The biggest significant change is the improved academic results, and the reason I think those results have come about are the school improvement program we’ve got complemented by Crescendo.”*
- *“Hand in hand with that, there’s a group called ACER. It was mainly under the auspice of another school – they wanted to look at social and emotional welfare development. So we administered this survey to the children. So did all the other schools in Kwinana and our results were not only really good for Kwinana schools; they were really good compared to the national results. So what that’s saying is the children feel... There’s different criteria in it so it’s how they feel about themselves, how they feel about their interaction with the education and all that sort of stuff. So they felt really positive in that area, and I would say Crescendo is a factor in that.”*

Principal, Medina Primary School

Most significant change summary: Socioemotional

- *“The biggest impact I have seen has been on the students. It really is the development of their confidence. Their ability to take risks with their learning, to try new things, to just have a go, confidence in their own ability and even their resilience, that if they get it wrong or if it doesn’t quite work, it’s okay. The music lessons are very scaffolded and supported, the kids are happy to take a risk with their learning and if they make a mistake it is not a big deal in that WASO classroom. They are supported all the way. I think for me it*

is that confidence, and then that confidence has transferred over into other learning areas, where they give things a go and they take risks.”

- *“I almost cried when [a student] told me his story about how he never thought a kid like him would ever have the opportunity to do violin. He said “I can’t believe I was given this opportunity, (teacher name).” And to see him perform yesterday (at the End of Year Concert) and I have seen him perform previously. Just his confidence... his behavior, the way he interacts. In his message, not only did he talk about the opportunity, how Griffin presents violin as fun, so he enjoys it and loves going, but the confidence he is given.”*
- *“To see the direct impact that music can have on one child’s life. To hear stories about how his behavior used to be and what his behavior used to be like.”*
- *“This story was significant for me because my kids don’t have the same opportunities as other kids and I want that for them.”*

5.4 Teaching Artist Stories

Crescendo Teaching Artist 1

Most significant changes summary: Aspirational

- *“One of the students in particular, said after we had figured out the whole pitch and rhythm for the song, ‘(Crescendo Teaching Artist name), we are really getting this. We get it!’ Then throughout this particular story, every time a child got something right, the whole class got really excited for them. The way we were doing it was very sequential, so once they got that the magnets represented different sounds per beat and then I started to draw the rhythm and one student said ‘(Crescendo Teaching Artist name), that is the musical notes, that is a piece of music’. It was a really big moment for me.”*

Crescendo Teaching Artist 2

Most significant changes summary: Socioemotional

- *“At Medina, I decided one week that I was going to send the violins home. It’s a bit of risk, you don’t know what’s happening at home, you don’t know if the violin’s going to get lost on the bus or dropped or whatever. But they all came back, no damage, taken care of, you could tell that they’d been practicing. By taking that step, they rose to it and you could see that they took the responsibility back home. Some of the parents engage with them and say, so and so has been practicing quite a lot. I had a note from a parent apologising that one of the students hadn’t practiced because a family member had come over, but to have that sort of parental support is really sweet... Getting that note really emphasized that it’s not just the students; it’s the students and the families that are being impacted. Especially if they have younger siblings, they can see the older ones practicing the violin and go, wow! That’s something I want to do. And then they work towards that.”*

6 CONCLUSIONS AND RECOMMENDATIONS

The outcomes of the program are clear; parents and teachers consistently reported improvements in students' confidence and personal agency, as well as better participation in the classroom. These outcomes demonstrate the program's immense direct value.

Program evaluation can largely be considered under three distinct concepts:

- The Theory of Change
- The Program
- The Impact

The Theory of Change explains the 'how' and 'why' of an intervention. Broadly speaking, 'where we are', 'where we want to go' and 'how will we get there'. In high-level social-impact design, program logic can be associated with this stage. Program logic is an associated process that fits within a Theory of Change, asking 'how will we know where we are going'. The Theory of Change for the Crescendo program is clearly articulated, and the program-logic will become clear as the longitudinal outcomes are evaluated.

Here the program is creating an early life-stage intervention to increase the chances of later-life success. It is simply not feasible for a program-logic lifecycle of this length to be meaningfully evaluated without additional evaluation resources over time. WASO's Crescendo program-logic is defined by wider research that considers the El-Sistema education model that inspired it. While it will be possible to assess the long-term education outcomes of the participating students as they enter high school, the complexity of such an evaluation without involvement from more schools in the region, would not necessarily provide the requisite sample size to find confidence in the results. To this end, short term evaluation at the program level spanning a participant's journey with the program through primary school (Primary to Year 6) has been fruitful so far.

The second distinct concept of 'the program' consists of the interrelation of activities that sit behind the 'intervention' within the Theory of Change. The difficulty of social-program research like Crescendo, when compared to research in other fields like medicine, is again the multitude of influencing factors that can affect the results.

The evaluation of this program therefore focuses on satisfaction, which reflects the success of its implementation. While satisfaction is used as proxy for effectiveness, it is still an important metric that influences other associated outcomes of a program. That being said, the opportunity to now develop a more guided approach to participant responses on perceptions of value can be established.

This finding relates to the final concept, 'the impact'. For WASO to truly understand and demonstrate the long-term outcomes of the program, the next stage is to quantify its impacts. This would not have been possible in the early stages of the program as many of the outcomes articulated in the Theory of Change require more time to become evident. With six years of the program now having taken place and participants entering high-school and beyond, there is greater capacity to evaluate its long-term impact and articulate its benefits.

APPENDIX 1 – NAPLAN RESEARCH

NAPLAN is made up of tests in the four areas (or ‘domains’) of:

- Reading
- Writing
- Language conventions (spelling, grammar and punctuation)
- Numeracy

NAPLAN results are available in the form of an average score for participating Australian schools. NAPLAN also provide national performance benchmarks for schools, as well as comparable benchmarks that consider parental occupation and education. These benchmarks are split into six distinct groups that consider parental occupation:

- Group 1: Senior management and qualified professionals
- Group 2: Other business managers and associate professionals
- Group 3: Tradespeople, clerks, skilled office, sales and service staff
- Group 4: Machine operators, hospitality staff, assistants, labourers
- Not in paid work: Not in paid work in the previous 12 months
- Not stated: No data was provided for parental occupation at the time of student enrolment

NAPLAN was not considered when determining the schools to participate in the program, as its value as an overall indicator for performance at the school level for a program like Crescendo is difficult to separate from other external factors. Research validity and practicality must be considered when evaluating a program like this. Validity refers to the generalizability of research findings; internal validity asks us to consider if the research findings are true or accurate in what they say, whereas external validity asks us to consider if research findings could apply in settings outside that of the study (i.e. the real world). In this sense, any outcome findings that relied on the NAPLAN results of participating schools would suffer criticisms of internal and external validity, unless the resulting outcome were of such significance that they could not be explained any other way.

This problem should not however discourage program managers from monitoring the outcomes of their own intervention, but for practical purposes, their time is likely to be better spent on monitoring the effectiveness of the program, rather than demonstrating the approach as valid. For this reason, it is therefore appropriate to consider whether the approach as described in the Theory of Change is of sound reasoning. The value of NAPLAN then can be in understanding the second-order outcome described within the Theory of Change as ‘scholastic performance’.

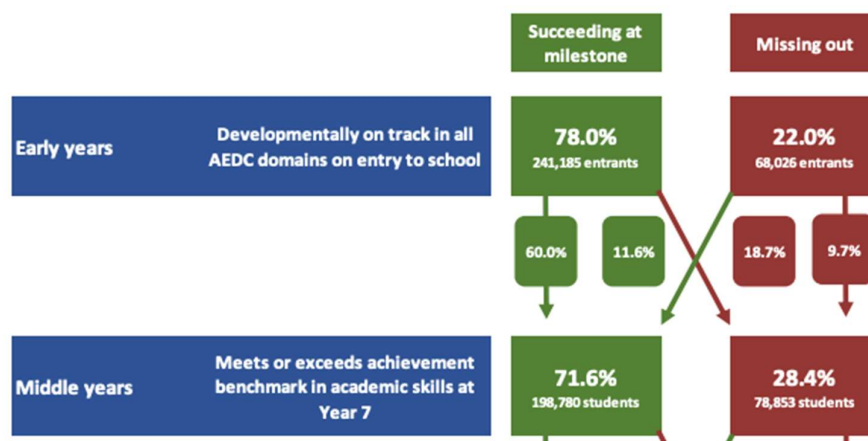
Lamb et al. (2015)⁴ reflect on four key educational milestones as part of their research into educational performance and socio-economic disadvantage in Australia. The first and second milestones, school entry and primary to secondary school transition respectively, are of greatest interest to the Crescendo program.

⁴ Lamb, S., Jackson, J., Walstab, A. and Huo, S., 2015. ‘Educational opportunity in Australia 2015: Who succeeds and who misses out.’ *Centre for International Research on Education Systems*, Mitchell Institute, Victoria University.

Approximately 22% of children aged four to five are not considered 'ready' to begin primary school. Readiness is determined by a combination of physical health and wellbeing, social competence, emotional maturity, language and cognitive skills and communication and general knowledge. Children in the lowest socio-economic quintile (explored in the following section) are of disproportionate risk in this metric; approximately 33%. The greatest disadvantage is seen in areas that matter most of later learning, being language and cognitive skills, and general knowledge and communication.

When considering NAPLAN results as a benchmark in the Year 7 milestone however, results offer unique insight into the value of school programs. The following figure sourced from Lamb et al. (2015) highlights the change potential of those who fail to meet the early-stage milestone and subsequently succeed in meeting the mid-stage milestone, as determined by NAPLAN performance. While benchmark performance drops from 78% of students meeting expectations in early years to 71.6% of students in Year 7, only 11.6% of students will successfully transition from 'underprepared' to 'meeting benchmark performance', compared to the 18.7% who start out well but then fall behind. This change in milestone performance for those underperforming to those meeting standards, is the lowest of all three transitions, while the change for those performing to those underperforming is the highest of all transitions. This suggests that primary school may be the most underserved learning period for academic intervention programs.

Figure 2: Milestone Transitions



Source: Lamb et al. (2015)

Disappointingly, Lamb et al. do not consider direct socio-economic indicators in their analysis of primary school academic performance (which may be due to the availability of the data), however they use other factors such as parental education to infer a correlation between socio-economic status and primary school academic performance. For example, when considering students with a degree-qualified parent, the proportion not meeting the overall reading benchmark increased by 4.3% between Year 3 and Year 7 (2010 to 2014) and 1.7% for numeracy. By comparison, students whose parents had not attained education above Year 11 had an increase of 10.5% in the proportion with a below reading benchmark, and an increase of 8.6% in numeracy. They concur the Australian education system does not adequately mitigate the adverse effects of lower parental education levels on educational opportunity, and may actually exacerbate them. To this end, the Crescendo

program is right to focus on primary-school age intervention, given its significant potential to generate impact in the area of scholastic performance.