



University of  
South Australia

# Research on Arts- Based Education

What is the impact of arts-based  
education on Social and Emotional  
Learning – a report for The Song  
Room

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## Executive Summary

This report presents the findings of a rapid evidence review commissioned by The Song Room to assess the impact of arts and music education on social and emotional learning (SEL) and student wellbeing.

The review was structured around three core research questions:

1. Is there strong evidence that music and arts education initiatives show positive impacts on SEL and wellbeing?
2. What success factors or program design elements influence the effectiveness of arts-based initiatives in supporting SEL and wellbeing?
3. How well-aligned are the three key Song Room programs—DUET, Kaleidoscope, and the Early Years Program—with the current evidence base?

To answer these questions, a synthesis of high-quality research was conducted, including meta-analyses, randomised controlled trials, quasi-experimental studies, and systematic reviews. This was followed by a desktop analysis of The Song Room's three core programs using a structured assessment framework based on the reviewed literature. The final report includes a summary of key evidence, identification of effective program features, and an evaluation of alignment between research and current practice.

### Overall findings

- Arts-based education, when intentionally designed and delivered, provides strong benefits for social-emotional development and broader student wellbeing, particularly in early and equity-focused education contexts.
- All three key Song Room program designs analysed in this report demonstrate **high impact**, showing strong alignment between research and practice and effectively strengthening student wellbeing and social-emotional learning across diverse contexts.

## Introduction

Arts education is increasingly recognised as a lever to support student wellbeing and learning beyond purely artistic outcomes. For The Song Room, key questions include whether arts and music initiatives lead to meaningful gains in social and emotional learning (SEL) and wellbeing, what design elements make those programs successful, and how its three programs (DUET, Kaleidoscope, Early Years) might perform in this regard.

This section addresses three overarching research questions:

1. Is there strong evidence that music and arts education initiatives show positive impacts on SEL and wellbeing?
2. What success factors or program design elements matter for arts initiatives to boost SEL and/or wellbeing?
  - a. Are there general principles about “what works” in SEL that can guide design of arts programs?
3. How would one rate the potential for impact of three Song Room programs (DUET, Kaleidoscope, Early Years) on SEL and wellbeing (on a 0-5 scale)?

Below, evidence is summarised in relation to these questions, drawing on research.

## 1: The impact of music and arts education on SEL and wellbeing

There is substantial evidence that participation in music and arts education can positively influence SEL and wellbeing outcomes. Arts education nurtures capacities such as self-awareness, empathy, communication, emotional regulation, and relationship skills. Students engaged in multi-modal creative experiences often experience growth in the five SEL domains: self-awareness, self-management, social awareness, relationship skills, and responsible decision-making (Collaborative for Academic Social and Emotional Learning, 2013; Sinha, 2023).

Structured and sustained arts programs strengthen executive functions such as inhibition control, goal orientation, and emotion regulation (Jamey et al., 2024; Jaschke et al., 2018). In early childhood, arts-based interventions have translated into moderate to large gains in creativity, emotional expressiveness, and flexible thinking (Burns et al., 2025). Among preschool children from low-income backgrounds, SEL-oriented curricula (which may include arts components) produced measurable improvements in emotional competence (Yang et al., 2019).

Culturally responsive arts learning further deepens wellbeing by reinforcing identity, belonging, and social connection. Evidence shows these elements are especially potent for First Nations learners or communities with strong cultural heritage (AERO, 2025).

In practice, multiple well-designed trials and longitudinal studies reinforce these outcomes. For example, one Randomised Control Trial (RCT) involving over 10,000 children across 42 schools in Houston (Bowen & Kisida, 2022) showed that arts educational opportunities reduced disciplinary infractions, increased engagement, increased tolerance, and resulted in writing outcomes. Small-group arts programs in early years consistently yield gains in emotional regulation, confidence, and imaginative capacity (Burns et al., 2025; Birrell et al., 2024). In addition, arts programs that integrate culture and identity support students' resilience, self-expression, and connection (AERO, 2025; Li, 2025).

Importantly, arts education does more than engage students in creative expression; it cultivates foundational capacities that are essential for lifelong learning, emotional resilience, and social connection. Through participation in music, drama, dance, and visual arts, students develop core skills such as self-awareness, empathy, communication, collaboration, and emotional regulation, all of which sit at the heart of SEL (Collaborative for Academic Social and Emotional Learning, 2013). These experiences create environments where young people can explore identity, take perspective, build relationships, and navigate emotional challenges in safe and meaningful ways.

Importantly, the benefits of arts education extend beyond the immediate context of arts programs. By strengthening executive function, creative thinking, self-confidence, and interpersonal communication, arts learning builds the cognitive and emotional infrastructure that underpins wellbeing and academic success across domains. As research has shown, these skills are not only valuable for SEL development but also enable young people to participate more fully in school, community, and society. In this way,

arts education serves as a vital platform for broader developmental outcomes, laying the groundwork for positive mental health, belonging, and engagement throughout a child’s learning journey.

In addition, given that effective SEL is most impactful when embedded into everyday teaching practices, there is strong potential for arts-based strategies—such as storytelling, role play, and creative collaboration—to be integrated into other curriculum areas. Embedding these arts-informed SEL techniques across subjects may help reinforce core social-emotional competencies in diverse learning contexts and provide more equitable access to SEL development across the school day. This cross-curricular application represents a promising area for further exploration and program design.

### **Conclusion**

Thus, the answer to the first research question is: **yes, there is strong and growing evidence** that arts and music education initiatives can generate positive effects on SEL and wellbeing, especially when programs are thoughtfully designed, sustained, and inclusive.

## 2: The success factors or program design elements that support SEL and/or wellbeing

### Program Design Matters

Not all arts initiatives yield equal impact. The difference often lies in deliberate design: alignment with SEL goals, teacher capacity-building, cultural relevance, and opportunities for reflection and relational engagement.

### General Principles of “What Works” for SEL within Arts

Several principles emerge from the evidence base and SEL reviews:

- **Embed SEL into everyday practices** rather than treating it as an “add-on.” SEL should be woven into arts activities through reflection, discussion, emotion vocabulary, role play, and storytelling. This aligns with evidence that effective SEL is integrated into daily teaching, not isolated (Lawson et al., 2019).
- **Sustain over time and provide sufficient dosage.** Short or one-off interventions yield weaker effects; longer sequential programs produce stronger results (Tony Foundation, 2025; Wan, Ludwig & Boyle, 2018). However, the questions around dosage or ‘how much’ arts education to provide is not clear cut and requires further investigation.
- **Capacity building and co-teaching with teachers.** Arts programs that mentor teachers and build their confidence led to more enduring uptake (Omasta et al., 2020; Wan et al., 2018).
- **Cultural responsiveness and identity alignment.** Programs that incorporate students’ cultural narratives, values, and symbols enhance belonging, safety, and engagement (AERO, 2025; Li, 2025).
- **Opportunities for student reflection, metacognition, and social interaction.** Activities should encourage students to discuss emotional insights, collaborative processes, and social meaning (Perry et al., 2019).
- **Community engagement and public sharing.** Exhibitions or performances help solidify belonging, pride, and purpose, reinforcing SEL gains (Caldwell, 2011; AERO, 2025).

By combining these design features integrated SEL, consistent engagement, culture and identity, teacher capacity, and reflection arts initiatives are better able to deliver sustained and equitable wellbeing outcomes. The table below provides a summary of the key claims, the strength of the evidence, the reasoning and the references supporting the claims.

## The Research - Key Claims & Evidence

Claim	Evidence Strength*	Reasoning	References
Arts education enhances SEL competencies	Strong (8–9/10)	Confirmed by RCTs, meta-analyses, and quasi-experimental studies	Jamey et al. (2024); Bowen & Kisida (2022); Burns et al. (2025); Yang et al. (2019)
Music training improves cognitive and emotional regulation	Strong (8–9/10)	Meta-analytic and neuroscience-backed evidence	Jamey et al. (2024); Tony Foundation (2025)
Creativity and imagination are strengthened through arts participation in early years	Strong (9/10)	Based on large systematic reviews in early childhood	Burns et al. (2025); Birrell et al. (2024)
SEL benefits are greatest with intentional curriculum design	Moderate (6–7/10)	Requires educator training and explicit planning	Omasta et al. (2020); Evidence for Learning (2021); Caldwell (2011)
Culturally relevant arts programs support identity and wellbeing	Strong (8/10)	Evident in First Nations and early years contexts	AERO (2025); Li (2025)

\*The criteria for evidence strength are detailed in Appendix A.

### Conclusion

Research consistently demonstrates that arts education is a powerful vehicle for building social and emotional learning, especially when programs are structured, sustained, and integrated with intentional pedagogy. Benefits span improved emotional regulation, empathy, confidence, school engagement, and wellbeing. These outcomes are particularly strong in early childhood and among students from disadvantaged or culturally diverse backgrounds. The evidence supports embedding arts education as a core strategy in SEL policy and practice.

### 3. The Song Room Programs

The table below highlights the potential impact ratings for the three Song Room programs (DUET, Kaleidoscope, Early Years), with reasoning grounded in research. The impact rating criteria are detailed in Appendix A. Under the table is an explanation of each program with a detailed justification.

Program	Impact Rating	Relevant references
<b>DUET</b>	4	Jamey et al. (2024) – Meta-analysis: Music training improved inhibition control (key to self-regulation and SEL). Jaschke et al. (2018) – RCT showed music education improved executive functioning and verbal IQ in primary students. Tony Foundation (2025) – Long-term music programs linked to gains in self-regulation and belonging; short-term less effective. Wan, Ludwig & Boyle (2018) – Arts teacher PD and music integration improved SEL and academic outcomes. Omasta et al. (2020) – Teacher planning is critical for embedding SEL in arts learning.
<b>Kaleidoscope</b>	5	AERO (2025) – Highlights effectiveness of culturally responsive, trauma-informed, arts-based wellbeing programs. Wan, Ludwig & Boyle (2018) – Arts integration (music, drama, visual arts) linked to SEL gains in school settings. Tony Foundation (2025) – Music education supports self-regulation and social cohesion.
<b>Early Years Program</b>	5	Burns et al. (2025) – Meta-analysis found moderate to large SEL-related gains (creativity, elaboration, imagination) in structured early childhood arts programs. Yang et al. (2019) – SEL curricula in early years education produced significant SEL benefits for low-income children (d = 0.24). Birrell et al. (2024) – Early childhood arts-inclusive programs improved emotion regulation, happiness, and connection. Li (2025) – Performance arts reduce speaking anxiety and build confidence and empathy in early learners. AERO (2025) – Arts programs that reflect culture and identity boost wellbeing in young children, especially First Nations learners.

#### DUET

**Rating: 4/5**

#### Summary & Justification

DUET is a professional development program focused on building teacher confidence and capability to deliver music education and creative pedagogies that support SEL. Its core strength lies in its mentorship model, where teaching artists work directly with generalist teachers to model and co-teach sequential, curriculum-aligned music lessons. The model supports capacity-building and sustainability, two key factors identified in the literature as necessary for long-term SEL outcomes (Tony Foundation, 2025; Omasta et al., 2020). Meta analyses showed a strong impact on SEL skills such as inhibition

control, planning and emotional regulation.

### Research Alignment

- Research highlights that **teacher confidence and capacity** are essential to embedding SEL within arts education. Programs like DUET, which offer sustained mentoring, align well with this recommendation (Omasta et al., 2020; Evidence for Learning, 2021).
- The **I teach, we teach, you teach** model mirrors gradual release of responsibility strategies shown to improve teacher agency and long-term practice change (Wan, Ludwig & Boyle, 2018).
- Music education specifically improves **inhibition control, planning and emotional regulation**, especially when delivered in structured and sustained forms (Jamey et al., 2024; Jaschke et al., 2018).

### Limitations

The impact of the program may vary depending on school leadership support and teacher engagement over the two-block structure.

### Conclusion

DUET has strong potential for impact due to its clear alignment with evidence on capacity-building, music's effect on SEL domains, and the importance of teacher confidence. Leadership support and highly motivated teachers would further strengthen its effect.

## Kaleidoscope

**Rating: 5/5**

### Summary & Justification

Kaleidoscope is an arts-based program explicitly designed to build SEL capabilities over 10 weeks through embodied learning. It integrates teaching artists and therapists, uses arts to address self-regulation and social-emotional reflection, and culminates in a community engagement event, all of which are supported by the SEL literature as key features of effective practice.

### Research Alignment

- **Trauma-informed, strength-based approaches** embedded in arts learning have been shown to support belonging, self-expression, and emotional safety (Burns et al., 2025; AERO, 2025).
- Community engagement projects (e.g., performances, murals) foster **school connectedness and identity**, especially among disadvantaged students (Caldwell, 2011; Tony Foundation, 2025).
- The use of **explicit SEL teaching** through arts activities (e.g., prompts, reflection, emotional vocabulary) is directly supported by reviews highlighting the need for **intentional SEL integration** in arts education (Omasta et al., 2020; Yang et al., 2019).

- Students with low arts access benefit the most from targeted, curriculum-aligned programs, particularly when delivered sequentially and in safe learning environments (Wan et al., 2018; Schneider & Rohmann, 2021).

### Considerations

There is limited evidence showing the impact of trauma-informed programs on children who have not experienced trauma.

### Conclusion

Kaleidoscope aligns with the strongest evidence base for SEL gains through arts education. It combines trauma-informed practice, explicit SEL design, and inclusive arts delivery. Its whole-school and community-facing structure enhances its systemic impact, justifying a top-tier rating. Furthermore, it supports constructs such as resilience, school engagement and fosters strong teacher student relationships all of which are shown to support SEL and overall student wellbeing.

## Early Years Program

**Rating: 5/5**

### Summary & Justification

The Early Years program is a play-based, arts-integrated model targeting 3–7-year-olds with a strong focus on communication, confidence, and emotional development. It incorporates peer mentoring, cultural storytelling, and parental involvement, aligning with the most robust research on SEL in early childhood.

### Research Alignment

- **Play-based arts education** in early years has been shown to foster **interpersonal skills, emotional regulation, imagination, and empathy** (Burns et al., 2025; Birrell et al., 2024).
- Programs that involve **families and communities** in early childhood have greater impact on SEL outcomes, especially in communication and emotional expression (Yang et al., 2019; Li, 2025).
- Regular, **sequential, culturally relevant learning** supports early development in **identity, confidence, and language acquisition**, particularly for priority equity learners (AERO, 2025).
- Arts learning at this stage contributes to both SEL and **early literacy** through music and storytelling, echoing the findings in music cognition and early phonics research (Jaschke et al., 2018; Tony Foundation, 2025).

### Conclusion

This program is backed by some of the strongest early years SEL evidence, particularly in using arts as a

tool for communication, language, and emotional growth. Its structure, cultural responsiveness, and engagement with families contribute to a full-spectrum SEL impact for young learners, justifying a full score.

**Overall conclusion:**

Across the three programs, all of which achieved high impact ratings, the evidence underscores that arts-based approaches when grounded in strong design, teacher capacity, and systemic integration are especially well-positioned to deliver sustained and meaningful social-emotional learning gains. Each program demonstrates a distinctive strength: DUET through building educator capability, Kaleidoscope through whole-school and community transformation, and the early years program through shaping the social-emotional foundation of young learners. Collectively, they form a highly impactful portfolio of initiatives, capable of driving both immediate improvements and long-term outcomes for student wellbeing and engagement.

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## Appendix A: The References

This final section summarises the research base used to inform the analysis and recommendations presented above. Each cited study is listed individually, drawing from a range of sources accessed through academic search engines and AI-supported tools such as Consensus.ai. To assess the strength of the evidence behind each arts-based SEL initiative, a structured scoring rubric was applied. The resulting scores are presented in the table below, providing a consistent framework for comparing methodological quality and relevance.

Score	Label	Criteria
9–10	Very Strong	- High-quality <b>Randomised Controlled Trials (RCTs)</b> , <b>systematic reviews</b> , or <b>meta-analyses</b> - Large samples (N > 500 or multi-study synthesis) - Direct measurement of <b>SEL outcomes</b> (e.g., self-regulation, empathy) - Statistically significant effects and reported <b>effect sizes</b> - Strong relevance to <b>arts-based or school-based SEL</b> programs
7–8	Strong	- <b>Quasi-experimental</b> or smaller RCTs - Well-conducted <b>systematic reviews</b> with moderate variability - Clear and relevant <b>SEL outcomes</b> - Transparent implementation and dosage info - Some limitations in generalisability or reporting
5–6	Moderate	- <b>Narrative reviews, case studies, or pilot studies, policy papers</b> - Smaller samples or fewer controls - SEL outcomes discussed but not always directly measured - Methodological or contextual limitations present
3–4	Low to Limited	- <b>Theoretical or conceptual</b> papers - Indirect links to SEL - Mixed or weak empirical findings - Low control, unclear methodology
0–2	Very Low / None	- <b>Opinion pieces</b> or non-empirical content - No demonstrated link to SEL outcomes - Methodologically weak or anecdotal evidence

Study / Source	Type / Method	Focus / Intervention	Findings / SEL Outcomes	Effect Sizes	Evidence Strength (1–10)	Age Range	Full Reference
Jamey et al. (2024)	Meta-analysis	Music training (instrumental)	↑ Inhibition control	g = 0.60 (RCTs); g = 0.31 (all)	9	4–11 yrs	<a href="#">Jamey et al. (2024).</a>
Bowen & Kisida (2022)	RCT	General arts education	↑ Empathy, school engagement,	Moderate to strong	9	8–13 yrs (a little older)	<a href="#">Bowen, D. H., &amp; Kisida, B. (2022).</a>

			reduced infractions				
<b>Burns et al. (2025)</b>	Systematic review and meta-analysis	Structured creativity interventions in early childhood education	↑ Creativity domains including originality, fluency, elaboration, and imagination; supports cognitive and emotional aspects of SEL (e.g., expression, flexible thinking)	Moderate to large (d = 0.70–0.94)	9	0–6 yrs	<a href="#">Burns et al. (2025)</a>
<b>Tony Foundation (2025)</b>	Evidence summary (neuroscience-informed review)	Quality, extended music education (e.g. instrumental learning, composing, listening)	Long-term music instruction linked to improved cognitive function, self-regulation, and social cohesion. Short, disconnected programs less effective.	Effect sizes not directly reported; synthesis of 70+ studies	8	Primary and secondary	<a href="#">Tony Foundation (2025)</a>
<b>Yang et al. (2019)</b>	Meta-analysis of 29 (quasi-)experimental studies	SEL-focused early childhood curricula (low-income populations)	↑ Social-emotional competence in low-income children	d = 0.24	8	3-5 years	<a href="#">Yang, W., Datu, J. A. D., Lin, X., Lau, M. M., &amp; Li, H. (2019).</a>
<b>Jaschke et al. (2018)</b>	RCT, longitudinal	Structured music ed. vs visual arts vs no-arts	↑ Executive function, verbal IQ (music); ↑	Moderate gains	8	6–9 yrs	<a href="#">Jaschke, A. C., Eggermont,</a>

			Visuospatial memory (arts)				<a href="#">L. H., Honing, H., &amp; Scherder, E. J. (2018).</a>
<b>AERO (2025)</b>	Evidence summary with First Nations insights	Culturally responsive wellbeing strategies	Highlights inclusion, cultural recognition, and arts-based identity work as supportive of wellbeing.	Narrative synthesis; effect sizes not specified	8	School-age incl. First Nations	<a href="#">AERO. (2025).</a>
<b>Vaughan, Harris, Caldwell (2011)</b>	Quasi-experimental; mixed methods	Multi-artform (The Song Room)	↑ Academic grades, NAPLAN literacy, SEWB (resilience, self-expression), attendance. Long-term > short-term.	ES up to 0.79; p = .022	7	Primary (disadvantaged students)	<a href="#">Caldwell (2011)</a>
<b>Wan, Ludwig, &amp; Boyle (2018)</b>	Systematic review (American Institutes for Research)	Arts integration in schools	Music, visual arts, drama show strongest impacts on learning and SEL outcomes	Some studies show medium to large effects; varies	7	Primary and secondary	<a href="#">Wan et al. (2018)</a>
<b>Váradi (2022)</b>	Literature review (100 international studies)	Music education and SEL (including Kodály method)	Music education linked to improved self-awareness, emotional regulation, empathy, social relationships, cooperation, self-	Not quantified; broad literature synthesis	7	Children and adolescents (broad age range)	<a href="#">Váradi (2022)</a>

			confidence. Kodály approach fosters community, identity, and long-term wellbeing benefits.				
<b>Schneider &amp; Rohmann (2021) – International</b>	Systematic review of 26 studies (quasi & experimental)	School-based arts education across domains (music, drama, dance, visual arts)	Positive effects in music (arithmetic, processing); mixed results in other arts; drama shows some social/emotional gains	Small to moderate (d ≈ 0.20–0.50) varies widely	6	School-aged children and adolescents	<a href="#">Schneider, V., &amp; Rohmann, A. (2021)</a>
<b>Li (2025)</b>	Thematic review of recent studies (2021–2025)	Performance arts in early childhood education (music, drama, visual arts)	↑ Confidence, communication, empathy, cultural awareness; reduced anxiety; supports SEL and language development	Not reported	6	Early years	<a href="#">Li, Y. (2025).</a>
<b>Evidence for Learning – Wellbeing Summary</b>	Systematic review of school-based wellbeing programmes	General wellbeing practices (some arts-linked)	Arts help when embedded in regular, trained delivery	Moderate; effects vary by fidelity	6	School-age	<a href="#">Evidence for Learning. (2021).</a>
<b>Evidence for Learning – Play-Based Learning</b>	Systematic evidence summary	Play-based learning (including some arts tasks)	Summary of research conducted – positive relationships	Effect sizes not reported; general positive	6	Early childhood	<a href="#">Arts participation (2022)</a>

			identified	trends			
<b>Omasta et al. (2020)</b>	Policy & curriculum review	Arts + SEL standards integration	↑ Need for explicit SEL integration	Theoretical	6	K–12	<a href="#">Omasta, M., et al. (2020).</a>
<b>Ewing (2010)</b>	Narrative review (Australia)	Characteristics of quality arts experiences	Suggests immersive, authentic arts practices support broader learning and engagement, but not based on high-rigor studies.	Descriptive only – no quant effect sizes	5	School-age	<a href="#">Ewing, R. (2010).</a>
<b>Birrell et al. (2024)</b>	Rapid review	Arts-inclusive programs (music, visual, storytelling)	↑ Emotional regulation, mood, happiness, connection	Small–moderate (study level)	5	0–6 yrs	<a href="#">Birrell, L., et al. (2024).</a>
<b>OECD (2013)</b>	International policy review	General arts education	Weak causal evidence of academic or wellbeing benefits; strongest justification is intrinsic (art for art's sake).	No reliable effect sizes reported	5	School-age	<a href="#">OECD. (2013).</a>