

# Montessori Education in Australian schools

### Charting a path

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### Montessori School Education 2021 Charting a path

Montessori education has a history in Australia dating back to at least 1915. Recent years have seen growth in the number of schools and enrolments in Montessori school-based education, building on a large footprint in the early childhood sector. It is therefore timely to have a conversation within and across schools about the role of Montessori education in the contemporary Australian context.



- The number of schools and students enrolled in Montessori schools is **growing yet remains marginalised** within the Australian school education sector.
- Diversity across schools and national bodies creates a challenge of identity for Montessori education.
- The scale of operations, absence of collective identity and aggregate data makes advocacy for Montessori education difficult.
- Topics that require attention within and across schools include i) building synergetic systemic supports and structures; ii) organising schools for impact; and iii) supporting the preparation and development of educators.

Montessori education is founded on the belief that children are capable of self-development and that they will reach their true potential when they are helped to find their own path in an environment that is specifically tailored to their needs at each stage of their development. Through a Relational Inquiry into the Provision of Education (RIPE) analysis, this report seeks to stimulate a conversation of where school-based Montessori education is and where it is going in the Australian context.

### A Relational Inquiry into the Provision of Education (RIPE) analysis

The research presented in this report draws on the following data:

- A snapshot of Montessori school-based education in Australia generated with school profile and location data sets from ACARA;
- An interview-based study with 20 school leaders from Montessori schools throughout the country; and
- The analytical resources of a RIPE analysis.

There is more work to be done in understanding the contemporary role of Montessori school-based education in Australia. This report is just the beginning of a conversation.

### The footprint of Montessori School Education in Australia

Throughout Australia there are **46** sites representing 37 individual schools **identifying as Montessori schools**. A further 11 (at least) government or independent schools have Montessori streams or classes.<sup>1</sup>

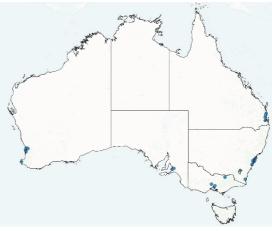


Fig.1. Montessori schools



## \*\*\*\* \*\*\*\* \*\*\*\* \*\*\*\*

In 2020, there were **3,867** students in Montessori schools



The <u>Montessori National</u> <u>Curriculum Framework</u> is one of only three alternative curriculum frameworks assessed as comparable with the Australian national curriculum.<sup>2</sup>



2020 enrolment is 29 per cent higher than it was in 2008.

Many primary schools are planning for expansion into adolescent programs.

There are currently two national bodies:





<sup>&</sup>lt;sup>1</sup> See Sample Supplement for technical details of this sampling

<sup>&</sup>lt;sup>2</sup> The other two being: International Baccalaureate Primary Years Program (PYP) and Middle Years Program (MYP); and Steiner National Curriculum Framework.

### Growing but on the margins

Since 2008, data from ACARA indicates that Montessori school-based education has experienced a **28.6 per cent increase in enrolments** – a significant period of growth. However, despite this growth, Montessori schools only constitute 0.48 per cent of schools (3.93 of independent schools), 0.10 per cent of students and 0.16 of staff within the Australian school education sector (0.60 and 0.81 of independent schools). This keeps the schools – both individually and as a collective on the margins.

Analysis of 2020 Australian Curriculum and Reporting Authority (ACARA) data finds **46 Montessori sites** representing 37 schools educating **3,867 students** (49 per cent girls, 51 per cent boys) and employing **961 staff** across 369.4 fulltime equivalent (FTE) teaching positions and 325.2 (FTE) non-teaching positions. Schools are either primary (n=24, 52 per cent) or combined (n=21, 46 per cent) with a single secondary school.

Using the Australian Statistical Geographic Standard (ASGS) categories, Montessori schools cluster in major metropolitan areas. Using 2020 data, 91 per cent (*n*=42) are in Major Cities, with 7 per cent (*n*=3) Inner Regional, and 2 per cent (*n*=1) in Outer Regional. Figure 2 provides an example of the clustering of Montessori schools across the Greater Sydney region.



Fig. 2 Montessori school in Sydney

### Equity, excellence, and efficiency

Analysis of publicly available data on the school is framed using the three key pillars of national (e.g., <u>Alice Springs – Mparntwe – Declaration</u>) and international (<u>Sustainable Development Goal 4</u>) statements: equity, excellence, and efficiency.

### Equity

Attending school is fundamentally important for student learning. The more a student is at school the more likely they are to make progress in their learning. For the identified Montessori schools, and using the latest ACARA data (2019), the average student attendance level is 91.2 per cent of the time ( $\sigma$ =3.25, *min*=83, *max*=99,  $\tilde{x}$  =91). This attendance level is comparable with government (90.7), catholic (92.4), other non-government schools (93.1) and just below the national rate (91.4).<sup>3</sup>

<sup>&</sup>lt;sup>3</sup> See: <u>Student attendance (acara.edu.au)</u>

Eacott et al.

Attending is important, but so too is attainment. As very few Montessori schools offer senior secondary education (n=2, 2014-2015; n=4, 2016; n=3, 2017; n=4, 2018-2019), there is little data on completion and awards of certification. Since 2014, 83 students have completed senior secondary schooling at Montessori sites, with 48 per cent (n=40) awarded senior school certificate (see Fig. 3). The annual and aggregate certification data is well below national rates (approx. 79 per cent)<sup>4</sup> but prone to fluctuations based on the small sample size and differences in reporting.

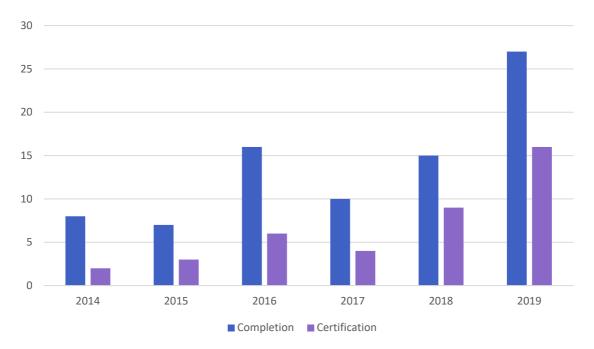


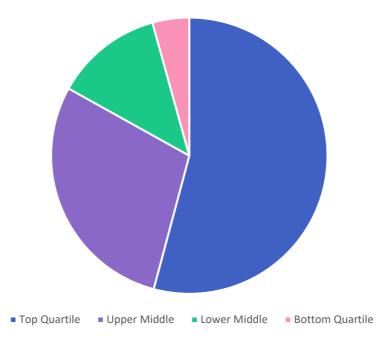
Fig. 3. Senior secondary school completion and certification at Montessori schools, 2014-2019

Of the 3,867 students enrolled in Montessori schools, there is almost an equal distribution of boys (n=1,956, 51 per cent) and girls (n=1,911, 49 per cent). Across the schools an average of 1.0 per cent of students identify as Indigenous (n=37,  $\sigma=1.6$ , min=0, max=5,  $\tilde{x}=0$ ), and 26.6 per cent have a Language Background Other Than English (n=35,  $\sigma=20.0$ , min=0, max=91,  $\tilde{x}=24$ ). Nationally, the average percentage of students identifying as Indigenous is 10.3 per cent (n=7,994,  $\sigma=17.7$ , min=0, max=100,  $\tilde{x}=4$ ) and Language Background Other Than English is 23.2 per cent (n=8,720,  $\sigma=25.9$ , min=0, max=100,  $\tilde{x}=12$ ).<sup>5</sup> Mindful of the small sample size of Montessori schools, they are less likely to have students who identify as Indigenous and close to the average for students with a Language Background Other than English when compared with the average Australian school.

<sup>&</sup>lt;sup>4</sup> See: <u>Year 12 certification rates (acara.edu.au)</u>

<sup>&</sup>lt;sup>5</sup> See : <u>ACARA - Data Access Program</u>

Generated from data on student family background and identified variables with the strongest association to student performance in national testing, ACARA developed the Index of Community Socio-Educational Advantage (ICSEA). The ICSEA has a national median of 1,000 ( $\mu$ =1,000) and a typical range from approximately 500 (representing the most extremely disadvantaged) through to approximately 1,300 (representing the most extremely advantaged). The average ICSEA for Montessori schools is 1,120 (n=35,  $\sigma$ =46.1, min=1,060, max=1,202,  $\tilde{x}$  =1,109). The average ICSEA for Montessori schools has consistently been above 1085 since 2008. Figure 3 displays the average distribution of Montessori school (n=35) families as a percentage across the quartiles (top, upper middle, lower middle, and bottom). Montessori schools are more likely to draw from the upper two quartiles than the average Australian school.



### Fig. 4. Average ICSEA distribution (%) in Montessori schools, 2020

### Excellence

As non-government schools, the viability and sustainability of Montessori schools is dependent on enrolments. At its most basic, successful schools are those that can sustain sufficient enrolments to maintain operations. Synoptic data shows that Montessori schools have increased enrolments by 29 per cent since 2008. Figure 5 shows the total enrolment data (FTE) for Montessori schools in the period 2008-2020.

Growth among the collection of schools has been inconsistent. While some schools have plans to expand offerings (including the addition of secondary schooling), other schools maintain a commitment to being a boutique provider.

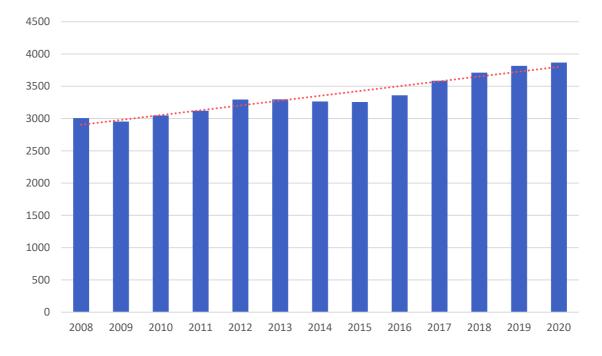


Fig. 5. Enrolment in Montessori schools 2008-2020<sup>6</sup>

A standard measure of success in schooling is through standardised testing regimes — both raw scores and student growth data. In Australia, the key approach is the National Assessment Program, Literacy and Numeracy (NAPLAN). This takes place in Years 3, 5, 7 and 9, with sub-tests in Reading, Writing, Spelling, Grammar and Punctuation, and Numeracy. Using the latest data (2019), Figure 6 displays a series of charts showing the results (average score) for Montessori schools in Year 3 NAPLAN. In addition to the mean for Montessori schools (in blue), there is a comparison with the national mean (purple). It should be noted than participation rates in NAPLAN are lower at Montessori schools (90 per cent, 2014-2019) than the national average of 95 per cent.

Figure 7 continues the synopsis by presenting the same analysis for Year 5 NAPLAN. As with Year 3 data, Montessori schools consistently perform at a standard higher than national average – a trend continued into Year 7 and Year 9 (although with smaller sample sizes, ranges of 6-10 and 6-8 schools respectively). This is not overly surprising given the relations between socio-educational advantage and student outcomes.

With the small number of schools and resulting small cohort sizes, it is inappropriate to display student growth data as there were frequently no comparison group. As Montessori education is not a competitive philosophy, the absence of comparison with statistically similar schools is not overly problematic. Instead, the presentation of data in Figure 7 and 8 is general information on the performance of students at Montessori schools.

<sup>&</sup>lt;sup>6</sup> See: <u>ACARA - Data Access Program</u>

### Year 3 NAPLAN

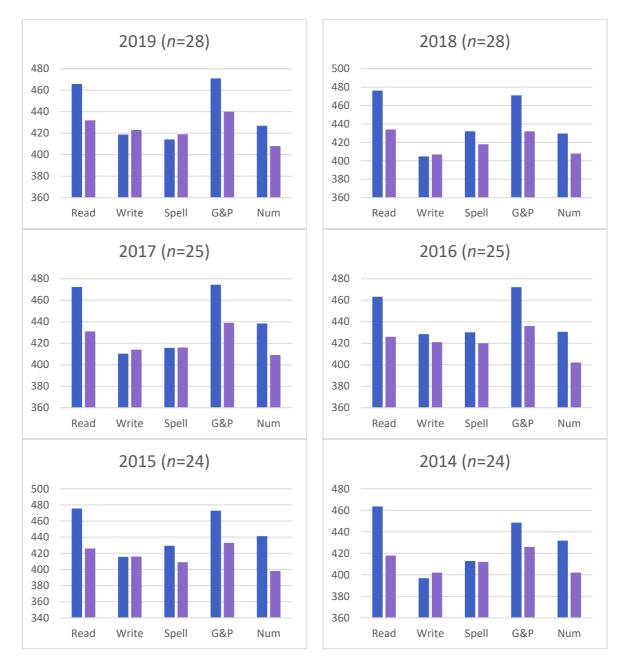


Fig. 6. Montessori schools (v national average) in Year 3 NAPLAN, 2014-2019

Although this is a relatively small sample, there is a sound coverage of Montessori schools. For the Year 3 data, there is a coverage of 74-78 per cent of all Montessori schools. By the time we reach Year 5, the coverage is less, ranging between 61-79 per cent. The data for Year 7 and Year 9 is not as comprehensive, as the number of schools is far fewer.

Standardised tests are just one measure of the outcomes of schooling. As a distinct form of schooling, evidenced through alignment with a specific philosophy (Montessori) and with an approved curriculum framework – it is quite likely that other indicators of effectiveness are needed or required. What these are, or could be, remains a challenge for Montessori schools.



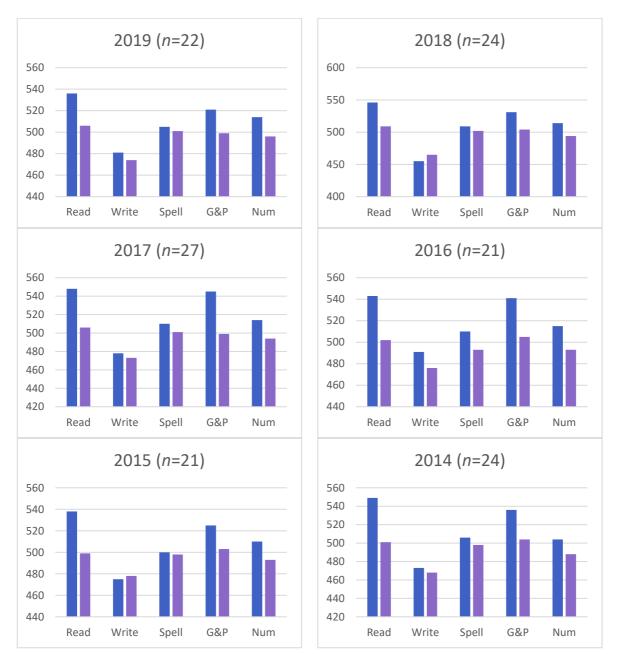


Fig. 7. Montessori schools (v national average) in Year 5 NAPLAN, 2014-2019

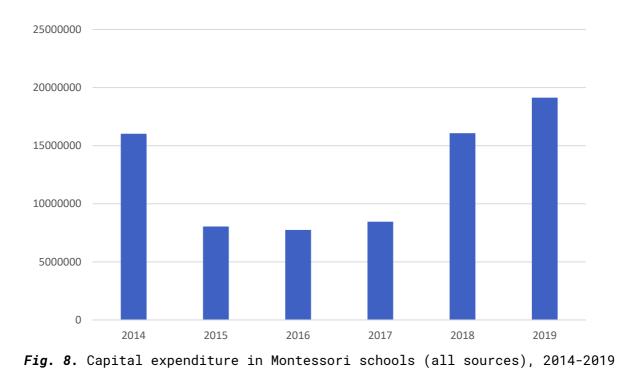
### Efficiency

The Australian Government is investing more funds into school than at any point in history. As non-government schools, Montessori schools receive funds through a combination of the Australian government; fees, charges, and parent contributions; State/territory government; and other private sources. Table 1 displays an overview of the descriptive statistics for recurrent funding (all sources) per student across identified Montessori schools. Using the Australian Curriculum and Assessment Reporting Authority (ACARA) data set, the 2019 national average recurrent funding per student is \$16,598.<sup>7</sup> Not surprisingly, given their status as non-government schools and drawing on school fees, the average recurrent funding for Montessori schools is higher than the average Australian school. In total, there was \$92 million of recurrent funding (all sources) committed to Montessori schools (n=36) in 2019 (the last reported year).

Year	N	x	σ	Min	Max	X
2019	36	20,499	6,405	12,264	46,649	17,949
2018	36	21,304	11,154	13,617	79,684	18,363
2017	34	17,706	3,806	10,462	25,223	17,157
2016	32	15,974	3,794	6,128	24,243	15,432
2015	32	21,695	16,603	10,706	85,927	15,745
2014	32	19,026	9,399	8,206	59,555	15,899

Table 1. Recurrent funding (all sources) per student, 2014-2019

With the growth in Montessori schools there has been demand for capital expenditure. Since 2014, \$75,481,282 has been invested in capital projects for the identified Montessori schools, with a significant growth trend since 2016. Table 2 displays aggregate annual data for the schools in the period 2014-2019. With the relatively small number of schools, fluctuations are common as large capital projects can skew the data, however there is a trend that Montessori schools are growing, and related capital expenditure follows.



<sup>&</sup>lt;sup>7</sup> See: <u>School income and capital expenditure for government and non-government schools</u> (Calendar year) (acara.edu.au)

### An evidence void

Despite the wealth of publicly available data on Montessori schools, there remains an evidence void with implications for how Montessori schools are perceived in the broader public and even within the education sector. Figure 9 below displays a data framework that maps UNESCO's Sustainable Development 4<sup>8</sup> - ensure inclusive and equitable quality education and promote lifelong learning opportunities for all - onto the data we have or do not have (marked in dotted boxes). Some of the evidence void is the result of scale rather than absence of data (e.g., completion, national test data).

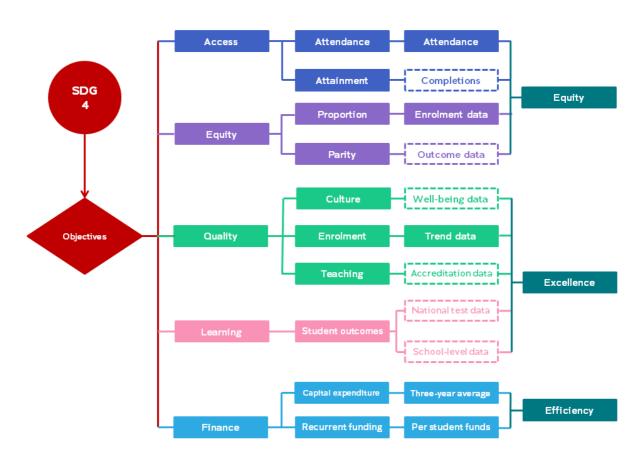


Fig. 9. Data framework on the equity, excellence, and efficiency of schools

The evidence void provides opportunities for others to impose judgements on the value of Montessori schools based on their own perceptions. In other words, in the absence of additional data and resulting evidence to support the work of Montessori schools others will make judgements of them using their own criteria. To address this issue, at least as a first step, this project is undertaking a RIPE Analysis to inform ongoing renewal of Montessori schools nationally.

<sup>&</sup>lt;sup>8</sup> See: <u>SDG 4: Education | Global Education Monitoring Report (unesco.org)</u>

### **Relational Inquiry into the Provision of Education (RIPE) Analysis**

The provision of equitable, excellent, and inclusive education<sup>9</sup> at scale focused on encouraging and supporting every student to be the very best they can be, no matter where they live or what kind of learning challenges they may face, <sup>10</sup> has been an enduring problem for government, systems, and schools.

Traditional approaches have focused on large-scale data sets to make claims concerning the equity, excellence, and efficiency of schools. What is missed in such approaches are matters such as the unique contexts of schools, their histories, culture, politics, social impact, and future trajectory. Drawing on the emerging field of relational studies, and particularly Eacott's *relational* approach,<sup>11</sup> RIPE analysis seeks to fill this gap in how we understand schools and schooling. Figure 10 displays and overview of the RIPE process.

# Relational Inquiry into the Provision of Education (RIPE) Analysis



Fig. 10. Relational Inquiry into the Provision of Education (RIPE) Analysis

RIPE analysis, as applied to Montessori schools in Australia, pays attention to: i) the assumptions held regarding Montessori education / schools; ii) the diversity of perspectives on what is a Montessori school;

<sup>&</sup>lt;sup>9</sup> See: <u>SDG 4: Education | Global Education Monitoring Report (unesco.org)</u>

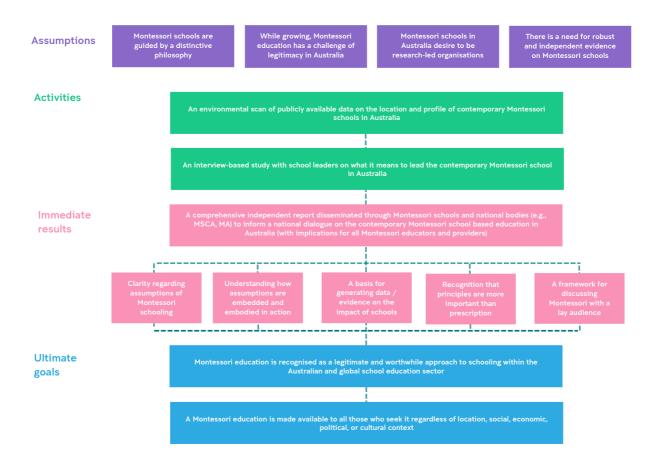
<sup>&</sup>lt;sup>10</sup> See: <u>The Alice Springs (Mparntwe) Education Declaration - Department of Education, Skills and</u> <u>Employment, Australian Government (dese.gov.au)</u>

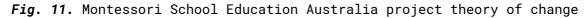
<sup>&</sup>lt;sup>11</sup> See: Eacott, S. (2018). Beyond leadership: a relational approach to organisational theory in education. Springer. <u>https://doi.org/10.1007/978-981-10-6568-2</u>

iii) how those assumptions and perspectives play out in practice; iv) describing that practice without defaulting to judging right and wrong; and v) offering generative insights to advance the agenda of Montessori education nationally (and internationally). Bringing this process into conversation with the intent of the project, it is possible to articulate a theory of change.

### A theory of change

As shown in Figure 11, the theory of change is underpinned by the premise that developing greater clarity regarding what is Montessori education (at a school and aggregate level) will lead to greater coherence in the operations of schools and the collection of Montessori schools nationally – all for the benefit of students, staff, and their respective communities. Additionally, it poses the greatest opportunity for crafting a persuasive evidence informed narrative of the work and impact of Montessori schooling.





In collaboration with MSCA, MA, and Montessori schools throughout Australia, this ongoing research is intended to re-cast Montessori school based education within the contemporary Australian context.

### **Contemporary school-based Montessori education**

I think increasingly people are looking for a Montessori education, they just do not know that it is Montessori. Participant 20

Investigating what it means to lead the contemporary Montessori school in Australia has raised three topics that require further dialogue and debate within and across Montessori schools and broader community.

All involved with Montessori school-based education share responsibility for engaging with these topics and thinking through the implications for the work of individual schools and all Montessori schools throughout Australia. The three topics are: what is Montessori school-based education; building the collective; and providing quality schooling (see Figure 9).

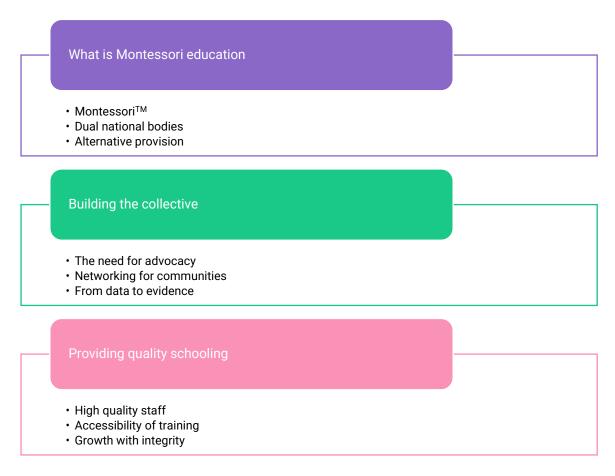


Fig. 12. Topics for dialogue and debate in Montessori schools

In what follows, the three topics are articulated with examples from participants. This is followed by a series of provocations to stimulate dialogue and debate within and across schools and entities related to Montessori school-based education in Australia.

### What is Montessori?

As a distinctive form of schooling, Montessori schools should be judged on how well they deliver on their stated philosophy. However, clarity regarding what exactly is Montessori education remains contested with potential for misunderstanding and brand damage.

Internal tensions within the Montessori community further amplify any misunderstanding. Based on the research undertaken for this report, major tensions include ambiguity concerning the very meaning of Montessori, the presence of dual national bodies, and the coupling with the broad label of alternative provision.

### Montessori™

Despite a history dating back to at least 1919,<sup>12</sup> Montessori education is not as well known in Australia as it is in Europe and the United States of America (Participants 01, 02, 04, 06 & 20). Not only is it lesser known, but there is considerable misunderstanding of what a Montessori education is (Participants 05 & 14). This has been further complicated with the rise of 'Montessori streams' in public and independent schools (Participants 02 & 05), and the rapid proliferation of early childhood centres using Montessori in their name or marketing (Participants 03, 06, 07 & 18).

The growing number of schools and services reflect a desire, even if still peripheral, for Montessori education within Australian society (Participant 19). However, the absence of an over-arching agreed upon articulation of what is Montessori education remains problematic.

One of the key problems Montessori education has always had is that people find it difficult to articulate what it is in a very short snapshot, the elevator pitch is often 20 minutes. Participant 08

In claiming to provide a different form of education, guaranteeing the integrity of that approach is important. To that end, quality assurance is of fundamental importance to Montessori education (Participants 07, 08 & 14). However, who gets to decide on what is, and is not Montessori education is a point of contention (Participants 02 & 14). Put simply, the absence of an over-arching set of principles – not prescriptions – within the Montessori community means the label is at best diluted and at worst compromised in the Australian context.

The presence of dual national bodies and perceptions of negativity and infighting between different groups can be 'quite debilitating' and unhelpful in promoting and advancing Montessori education (Participants 02 & 18).

<sup>&</sup>lt;sup>12</sup> See: Feez, S. (2013). Montessori: The Australian story of a revolutionary teaching method, Sydney: UNSW Press; O'Donnell, D. (1996). Montessori Education in Australia and New Zealand, Sydney: Fast Books.

Dual national bodies

The presence of two national bodies is seen as problematic by many participants (e.g., Participants 02, 03, 04, 06, 08, 10, 13, 14, 17, 18 & 19), with a number acknowledging the issue but trying to stay out of it (Participant 02, 13 & 14).

As Participant 18 explains, 'most schools are fence sitting, as no one wants to put their feet solely in one camp because who knows how this will play out'. The two national bodies are not necessarily a problem. Rather, it is the absence of a clear demarcation of roles and responsibilities that creates confusion and frustration (Participants 06, 10, 14, 17, 18 & 19). It is the perception of 'in-house arguments', and disunity within the Montessori community that is problematic and with flow on effects for all.

Similarly, disagreement or hierarchies of training providers (Participant 08) adds to the complexity of the contemporary Montessori community. The consequence being a splintering of the community. Participant 10 warns that 'if the Montessori community pushes people out then not only is growth difficult, but it is not inclusive'. Participant 14 adds, 'it is a very muddy pool, and it would take a lot of energy from a special group of people' to overcome the current divisions. The absence of a collective identity limits the advancement of Montessori education nationally.

### Alternative provision

Many, if not all, Montessori schools in Australia started with a group of passionate parents who wanted a different type of education for their children (Participant 06). In doing so, Montessori education – particularly school-based – gets conflated with other providers such as Steiner under the umbrella term – alternative education (Participant 17). Many myths persist about the alternative nature of schools with perceptions of 'the hippies on the hill (or down the valley)', or that the schools that cater for society's misfits (Participants 06, 10, 12 & 16).<sup>13</sup>

Elsewhere, Montessori is perceived as the highest quality of education, and people seek it out (Participant 06). Rather than alternative, and this is present in some Montessori communities within Australia, Montessori education is considered boutique (Participant 19), niche or even exclusive having shifted 'from boho to yuppie cool' (Participant 18), however in many ways it is now unaffordable to the stereotypical hippies (Participant 08).

The presence of a <u>Montessori National Curriculum Framework</u> sustains the belief that the schools are alternatives to mainstream schools. The framework is however a framework and not an alternative curriculum. It has been assessed by the Australian Curriculum and Reporting Authority (ACARA) as comparable to the national curriculum<sup>14</sup> It is not a separate curriculum, just a different way to deliver it (Participant 06). This is far removed

<sup>&</sup>lt;sup>13</sup> See also: Mills, M., & McCluskey, G. (2018). International perspectives on alternative education: Trentham Books; Riddle, S., & Cleaver, D. (2017). Alternative schooling, social justice and marginalised students. Palgrave Macmillan.

<sup>&</sup>lt;sup>14</sup> See: <u>ACARA - Recognition register</u>

from any perceived 'free for all' (Participants 11 & 13). If anything, there is greater structure in Montessori education than mainstream (Participant 06), it is just not immediately observable.

However, unlike some schools such as large long-standing independent schools that can explicitly articulate what a graduate will look like, Montessori education follows the child (Participant 12). This creates an element of risk for families (Participants 06 & 11) and caution from regulators and government (Participant 06). Put simply, Montessori education is difficult to articulate in orthodox ways and this has considerable implications for how it is perceived within the broader community.

### Summary

Montessori education has a long history in Australia, as with elsewhere. It does however remain on the periphery of school-based education. There is no trademark on the label 'Montessori' and even when explicit training has been undertaken there is variability across schools. Attempts to provide an overarching set of principles of practice has been limited due to contestation among the Montessori community and the perception of dual (duelling) national bodies.

In the absence of a collective identity, it has proven difficult to advocate on behalf of Montessori schools among the broader community. As Participant 07 noted, 'people just do not know about us.' While it is difficult, if not inappropriate, to reduce Montessori education to a collection of instructional techniques, curricular objectives, or didactic materials,<sup>15</sup> there is a need to advocate for Montessori schools (and Montessori education more broadly). Divergent perspectives and the absence of an agreed position makes it difficult to know what exactly any advocacy should be based. To address this requires attention to what exactly is Montessori education in the context of contemporary Australia and the curation of data and evidence to support that case.

<sup>&</sup>lt;sup>15</sup> See: Cossentino, J. (2005). 'Ritualising expertise: a non-Montessorian view of the Montessori Method'. *American Journal of Education*, 111(2), 211–244.

### **Building the collective**

The absence of clarity concerning what is (and is not) Montessori schoolbased education has major implications for the collective. Dual national bodies amplify this lack of clarity, enabling myths and misunderstanding to circulate in broader communities creating unnecessary pressure on Montessori schools.

Although building a single national Montessori school system throughout Australia is not necessarily desired by all, there is value in harnessing the potential of the collective. Doing so would create a coherent approach to advocacy, enhanced potential for networking within the Montessori community and give purpose to the translation of data into evidence as a basis for advocacy and telling the story of Montessori education.

### The need for advocacy

Government, and regulators such as the NSW Education Standards Authority (NESA), do not necessarily understand Montessori education. With no national representative body that can lobby government and other agencies there is opportunity lost for the Montessori community (Participants 06 & 16). More than just a marketing campaign (Participant 10), Montessori schools are up against very strong independent schools, not to mention Catholic and Government school systems. This further disadvantages Montessori schools as they do not have a large organisation behind them (Participant 16).

Advocacy of and for Montessori education is particularly timely in the Australian context. The mantra of 'follow the child' (Participant 06) is consistent with recommendations from the 2018 Gonski Report<sup>16</sup> and OECD reports<sup>17</sup> calling for 21<sup>st</sup> century skills for personalised learning approaches where children and youth move through curriculum at their own pace (Participants 02, 03, 05 & 11). There is a timely opportunity for Montessori education to advocate for their approach in the context of national and international reform agenda. However, if that is not capitalised on, others will fill that space (Participant 17).

In support of advocacy efforts there is a need for robust evidence. Currently, there is no systematic approach to generating high quality independent research on the impact of Montessori education on students, educators, and communities (Participant 06). Although there is a body of literature on Montessori education,<sup>18</sup> there is an absence of independent research in the Australian context (Participant 16). The more high-quality

<sup>&</sup>lt;sup>16</sup> See: <u>Through Growth to Achievement: Report of the Review to Achieve Educational Excellence</u> <u>in Australian Schools - Department of Education, Skills and Employment, Australian Government</u> <u>(dese.gov.au)</u>

<sup>&</sup>lt;sup>17</sup> See: OECD (2020), Back to the Future of Education: Four OECD Scenarios for Schooling, Educational Research and Innovation, OECD Publishing, <u>https://doi.org/10.1787/178ef527-en</u>
<sup>18</sup> See: Bagby, J., Wells, K., Edmondson, K., & Thompson, L. (2014). A review of the literature, 2010-2013. Montessori Life, 26(1), 32-41.

rigorous and robust research, arguably conducted by universities, of the impact of Montessori education the more comfortable people (especially parents, but also regulators) will be with it (Participant 20).

### Networking for communities

Many schools feel isolated and not part of a wider Montessori community (Participants 05, 06, 13 & 16). Significant efficiencies can be achieved through systematic networking across the collective of schools, overcoming the need for multiple schools to be generating parallel work simultaneously. As the administrative requirements on schools have increased – through legislation, regulation, and accreditation (Participant 11) – the potential for achieving at scale efficiencies through networking and collective endeavours is heightened.

According to Participant 06, the last ten years has seen a shift to more non-Montessori trained administrators taking on principalships. With minimal systemic support for schools, principals, boards, and school communities are forced to look for alternatives such as Independent Schools Associations in their respective state/territory (Participant 16). At the same time, the pandemic has generated an opportunity for the Montessori community to explore alternate ways of networking (e.g., online) to 'crosspollinate information' across schools (Participant 07). This has the potential dual impact of breaking down boundaries between schools to prevent feelings of isolation while also building capacity across schools for the benefit of the collective.

There is a tension for learning within and across the collective of contemporary Montessori schools. For some, there is a perception that the collective (including national bodies) are inward looking and not paying sufficient attention to how other systems and schools are moving forward (Participant 03), and that by looking within schools are simply re-affirming what they are already doing with an under-developed connection to contemporary research (Participant 12). Enhancing network opportunities – including online – within and beyond the Montessori community offers the potential of greater cross pollination of information and ideas (Participants 05, 07, 13 & 15). It also facilitates the sharing of data on programs and their impact leading to greater evidence of the collective contribution of schools.

### From data to evidence

In the absence of a collective entity there is no repository of data and the translation of that data into evidence to promote Montessori education (Participant 04). Such a role would be crucial to advancing the advocacy agenda, and generative of within and across school conversations based on education.

Not everyone who works in Montessori education is on board with the need for data (Participant 03), and many have consciously avoided it for a long time (Participant 12). This has created a tension where there is minimal evidence at scale to advocate for the effectiveness of Montessori education. Despite claims of being different there is no way of measuring or supporting the claim except to reject all other measures as not consistent with Montessori education (Participants 01 & 06). The tension of what to collect is timely and important work for the Montessori community now (Participants 14 & 16).

Montessori was very data driven, primarily through observation, as a scientist (Participant 01). The quantity and quality of data generated in primary schools is above and beyond many other schools (Participant 12). There is nothing to stop scaling this data generation up across schools. Throughout Australia, there has been increasing uptake of commercial products such as Transparent Classroom<sup>19</sup> (Participants 05, 06, 14, & 20). Additionally, more schools are using measures such as the South Australian Spelling Test, PAT among others. Put simply, there is lots of data being generated and analysed in contemporary Montessori schools (Participants 03, 06, 08 & 17), it is just not systematised or used for systemic advocacy and decision-making.

### Summary

The need for an overarching framework for Montessori school-based education is long overdue. Its absence has allowed myths and misunderstandings to circulate within the broader community with consequences for individual schools and the collective.

Opportunities to establish and enhance networking opportunities for educators - potentially fast-tracked courtesy of the pandemic - will be fundamental to building the collective capacity of the Montessori community throughout Australia and opening new opportunities beyond.

Further growth and advocacy can be made possible with greater attention to school and collective data generation, analysis, and translation into evidence to support Montessori education.

<sup>&</sup>lt;sup>19</sup> See: <u>Transparent Classroom</u>

**Providing quality schooling** 

I think a lot of research has been done in the way children learn, and it seems to align with what Montessori has been saying for the last 150 years. Participant 01

Building a collective identity based on evidence of impact and advocating for Montessori education is only worthwhile – and even possible – if there are sufficient high-quality schools. Growth in enrolments, publicly available and anecdotal data indicate this is the case, but it cannot be assured forevermore.

Sustaining positive impact on students and communities is dependent on high-quality staff, within and across schools, delivering Montessori education. Integral to maintaining the quality of provision requires accessibility of training to provide staff with opportunities for growth and renewal in their practice. Foregrounding the quality of staff allows for growth with integrity in the sector.

### High-quality staff

Montessori education aligns with what is considered 'good teaching'. Despite following the child, Montessori is not about 'just giving the students a nice experience' and 'making them feel good'. It is about providing support and facilitating children to be disciplined and work hard in their learning (Participants 08 & 17). This places a responsibility on staff for ensuring learning is taking place (Participants 02, 08, 14 & 19) but focused on the pace of the child not the teacher (Participant 07). This requires a well prepared, confident, and grounded in Montessori educator.

The three-year cycle enhances the quality of education (Participant 12), as staff have the time to get to know and develop children without rushing through curriculum content (Participants 01 & 14). It also contributes to the stability of staffing (Participant 08). Montessori schools are known for being cohesive and collegial (Participant 01), with staff less likely to pursue leadership roles (Participants 03 & 18),<sup>20</sup> instead staying in the classroom fine tuning their practice.

Our teachers are not bombastic. We attract a very thoughtful, quiet, modest type who are not brash and out there telling others what to do. Participant 18

There are however some flow-on effects from stability, including issues with succession planning (Participant 18) and staff mobility and enrichment (Participant 11). Additionally, minimal vacancies make attracting or the establishment of a pool of Montessori trained educators problematic as

<sup>&</sup>lt;sup>20</sup> See also: Lillard, A.S. (2019). Shunned and Admired: Montessori, Self-Determination, and a Case for Radical School Reform. *Educational Psychology Review*, 31, pp. 939–965 DOI: 10.1007/s10648-019-09483-3

there are few job options (Participants 04, 13 & 16). Attracting and retaining high-quality staff is dependent on the accessibility of training (Participants 05 & 16).

### Accessibility of training

The length of qualifications for our staff (four-year bachelor's degree then Montessori training), is consistent with medicine (Participant 07). However, training has been and remains an issue for Montessori schools (Participant 10).<sup>21</sup> One cannot become a Montessori educator by simply reading books, there is a need for training.<sup>22</sup> Accessibility (Participants 04, 13 & 18), financial burden (Participants 03, 04, 07 & 13), quality of provision (Participant 18), snobbery of providers (Participant 04) – an issue that many believe needs to be called out (Participants 01 & 10), and the time commitment (Participant 07) for educators are all issues.

The expectation, if not requirement, of employing Montessori trained educators is an internal tension and external pressure for schools. Finding qualified staff is a struggle (Participant 08), sometimes leading to poaching staff from other Montessori schools (Participants 02 & 13). Current practices of requiring new staff (including university qualified educators) to take on assistant roles while completing Montessori training (Participants 04, 05 & 19) limits the pool of candidates – especially if shifting full costs to candidates (Participant 07). This is amplified when schools only accept a particular training provider, and that training is irregularly offered or difficult to access.

Other schools are willing to take on 'Montessori aligned' if not trained educators (Participant 20) and support their professional growth. This approach de-centres the training or provider of that training and focuses more on the individual educator. It does however raise the expectations on schools to provide training for educators.<sup>23</sup> However, this loosening of expectations (which can be for the purpose of having staff), needs to be balanced against parental pressure to have trained educators in schools (Participant 20) and maintaining the integrity of Montessori provision.

### Growth with integrity

The value of Montessori education is grounded in a schools' adherence to the Montessori philosophy.<sup>24</sup> Fidelity in delivery of a Montessori education means there is stability and certainty rather than constant changes following the latest fads and fashions (Participants 04, 05 & 06).

<sup>&</sup>lt;sup>21</sup> See also: Feez, S. (2013). Montessori: The Australian story of a revolutionary teaching method, Sydney: UNSW Press

<sup>&</sup>lt;sup>22</sup> See: Cossentino, J. (2009). Culture, Craft, & Coherence: The Unexpected Vitality of Montessori Teacher Training, Journal of Teacher Education, 60(5), 520–527 doi:10.1177/0022487109344593

<sup>&</sup>lt;sup>23</sup> See: Edwards, C. P. (2002). Three Approaches from Europe: Waldorf, Montessori, and Reggio Emilia. *Early Childhood Research & Practice*, 4(1), 1-14.

<sup>&</sup>lt;sup>24</sup> See: Cossentino, J. (2009). Culture, Craft, & Coherence: The Unexpected Vitality of Montessori Teacher Training, *Journal of Teacher Education*, 60(5), 520–527. doi:10.1177/0022487109344593

Financial realities however create a challenge for growth (or survival) without compromising the integrity of the approach (Participant 02).

Apart from the attraction of the Montessori approach, the small size of schools is attractive to parents (Participant 16). The average Montessori school has an enrolment of 104 FTE students ( $\tilde{x}$  =94), well below the national average of 400. No child gets lost in a Montessori school (Participant 01). However, scale of operation does have some limitations. With small scale comes less resources. Identifying the ideal size for financial viability and integrity of Montessori education is an enduring challenge (Participants 02 & 03). Growth brings pressure of premises too.

Availability of suitable sites was mentioned by multiple participants (e.g., 02, 11 & 17). In some cases, it put downward pressure on growth and sustained pressure on school leaders and boards to generate sufficient funds and keep on top of constantly changing regulations and accreditation requirements – all administrative tasks reducing the focus on the core business of teaching and learning. The result is that many schools have been forced to spread over multiple sites – sometimes with minimal interactions for staff across sites (Participant 11).

An increasing challenge for Montessori education in Australia is expansion into secondary schooling. While there is a reported desire from schools and parents (Participants 04, 06 & 17), talk of limiting enrolment to those who attend Montessori primary schools caps potential growth (Participants 11 & 13) and limits those who can access Montessori education to those entering in kindergarten (or before).

### Summary

When parents choose a Montessori school for their child/ren, they are looking for something different to mainstream schooling. At the same time, they do not want to disadvantage their child (Participant 09 & 11). The Montessori approach is a systematic framing for teaching that focuses on growth of the child as an individual and the prepared environment. The quality of Montessori schools is dependent on the quality of staff.

For a variety of reasons, high quality teacher training is not always available at the right time or cost to be accessible to all. This has implications for the preparation of educators and the on-going professional learning of staff. High quality training is fundamental to building and sustaining a quality workforce and ensuring the integrity of Montessori schools.

Building the profile of Montessori education, and advocacy for its impact on student outcomes is dependent on integrity of schools against the Montessori approach. Balancing the viability of schools (e.g., financial position) with integrity to the Montessori philosophy is an enduring struggle for educators and school boards requiring attention to many internal tensions and external pressures.

### Telling the story

A Montessori education is not limited to any kind of student. There is currently unmet potential, although this is arguably why there is an expansion of provision, in reaching Indigenous students (Participant 07),<sup>25</sup> gifted and talented (Participant 12) or those with additional needs (Participant 16)<sup>26</sup> and STEM education.<sup>27</sup> Montessori education provides the opportunity for children to 'really jump ahead and promote their own area of interest', a key point of difference that needs to be promoted (Participant 12). But how can Montessori education be provided to all those who seek it?

> Montessori is for every child, but it is not for every parent Participant 07

Fidelity of the Montessori approach has been an enduring issue for schools the world over.<sup>28</sup> Variation within schools is as great or greater than across schools diluting broader understanding and the profile of Montessori education.

Amplified by the lack of exit examinations enabling explicit demonstration of the impact of a Montessori program, there remains caution as to the effect on student achievement (Participants 12 & 14). This is despite a body of literature supporting such claims,<sup>29</sup> and anecdotal evidence. Participants argued for data on student well-being (Participants 15, 19 & 20), graduate outcomes or destination (Participants 06, 08 & 15) and greater systemising of anecdotal data.

This creates an opportunity and path forward for Montessori school-based education in Australia. Building the necessary infrastructure and data generation that supports individual schools and communities while simultaneously curating the aggregate data necessary to present evidence on the impact of schools collectively.

There is work to be done. Identifying desired data points, the role of schools and collective bodies, among others, but the potential short- and long-term payoff for Montessori education would be substantial.

<sup>&</sup>lt;sup>25</sup> See also: Rioux, J., Ewing, B., & Cooper, T. J. (2021). The Montessori method, Aboriginal students and Linnaean zoology taxonomy teaching: three-staged lesson. *The Australian Journal of Indigenous Education*, 50(1), 116-126. doi:10.1017/jie.2019.10

<sup>&</sup>lt;sup>26</sup> See: AuCoin, D. and Berger, B. (2021). An expansion of practice: special education and Montessori public school. *International Journal of Inclusive Education*, 1–20. doi:10.1080/13603116.2021.1931717

<sup>&</sup>lt;sup>27</sup> See: Livstrom, I. C., Szostkowski, A.H and Roehrig, G.H. (2019). Integrated STEM in practice: Learning from Montessori philosophies and practices, *School Science and Mathematics*, 119(4), 190–202.

<sup>&</sup>lt;sup>28</sup> Marshall C. (2017). Montessori education: a review of the evidence base. NPJ science of learning, 2, 11. doi:10.1038/s41539-017-0012-7

<sup>&</sup>lt;sup>29</sup> See: Marshall, C. (2017); L'Ecuyer, C., Javier, B. and Francisco, G. (2020). Four Pillars of the Montessori Method and Their Support by Current Neuroscience. *Mind, brain and Education, 14*(4), 322; Denervaud, S., Knebel, J.F., Hagmann, P. and Gentaz, E. (2019). Beyond executive functions, creativity skills benefit academic outcomes: Insights from Montessori education, *PLoS One*, 14(11). doi:10.1371/journal.pone.0225319

# This initial work is the first step in a long-term project focused on building alternative school systems.

We have identified a range of potential opportunities for continuous improvement within and across Montessori schools (including national bodies). These opportunities would strengthen the position of Montessori education within the Australian context and lay the foundations for expanding provision to all those who seek a Montessori education (See Fig. 13). Many of these opportunities require major cultural change and would require several years to implement.

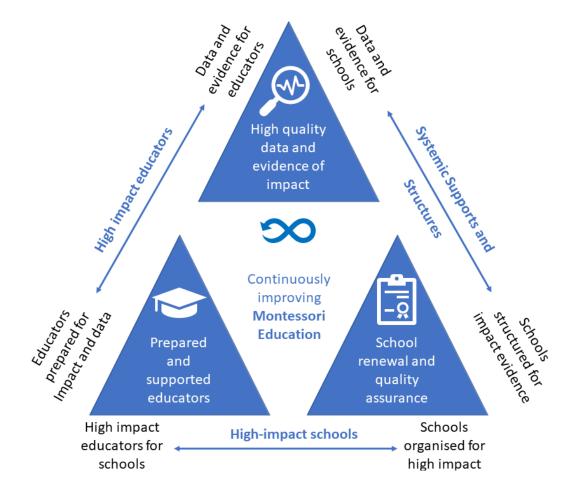


Fig. 13. Framework for systemic reform in Montessori school education

For the existing national bodies there appear to be opportunities to coexist through less competition and greater complementarity.

- With at least 37 schools, there is sufficient scale of operation to warrant greater data collection, curation, and dissemination of evidence to inform school activities and advocate for Montessori education.
- With greater than 961 staff there is a need for diverse, regularly offered, accessible, affordable, and high-quality professional learning.
- Growth in schools makes it timely to investigate the establishment of quality assurance measures that balance the need for fidelity of Montessori education and professional reflection based on improvement.

Across the Montessori school-based education community there appear to be opportunities to tell the story of Montessori education and outcomes.

- With 3,867 students, and growing, attending Montessori schools, it is imperative schools have evidence of their impact on student outcomes.
- There may be the need to draw on a wider range of data points or develop new ones to capture the outcomes of Montessori education.
- Expansion into secondary education, drawing on the strengths of primary schooling and potentially increasing reach of Montessori education.

### For individual schools there appear to be opportunities to tell the story of Montessori education with supporting infrastructure, preparation and development.

- School-level capacity building activities focuses on educators showcasing within and across schools student learning consistent with the Montessori approach and National Curriculum requirements.
- Greater sharing within and across schools of programs and initiatives to support student learning.
- There is already substantial data on student learning (e.g., observational data and notes) that can be systematised to showcase the impact of Montessori education.

	Target unit				
	Systemic	Schools	School		
	<ul> <li>Collection, cur dissemination c</li> </ul>	ation and f aggregate data			
	<ul> <li>Quality assurance balancing fidelity and reflection</li> </ul>				
	<ul> <li>High quality, affordable and accessible professional learning</li> </ul>				
	<ul> <li>Identify or develop appropriate measures to capture impact of Montessori education</li> </ul>				
Montessori School-based Education		• Expansion into education	secondary		
		• School-level ev on student lear	idence of impact ning		
		<ul> <li>Capacity buildi impact on stude</li> </ul>	-		
		<ul> <li>Greater sharing across schools</li> </ul>			
			<ul> <li>Systematise data curation</li> </ul>		

Table 2. Overview of opportunities and target unit

# Significant internal tensions and external pressures will need to be overcome to effectively address these opportunities

## Many of these opportunities have previously been identified by Montessori educators, schools, and professional bodies

• Some actions have commenced, although often ad hoc and small scale

### However, significant barriers and challenges have prevented these opportunities from being pursued or scaled up in the past

- Dual national bodies and a lack of certainty regarding roles
- Limited data to advocate on behalf of Montessori school-based education
- Regulation and accreditation changes requiring administrative time
- Lack of critical mass to provide regular professional learning
- Frequent changes in school board composition and loss of knowledge
- Lack of school-level or aggregate resources leading to inefficiencies
- Minimal understanding of Montessori approach in broader community

### Addressing opportunities requires

- Detailed models and plans, including engagement and analysis of stakeholder feedback, related to financial and educational implications
- Explicit and transparent communication of the rationale behind proposed changes and the capacity of individual educators, schools, and the collective to maintain and improve outcomes within and across schools either directly or through enhanced support structures and systems.

Drawing on work from Boston Consultancy Group,<sup>30</sup> below is a framework to assist MA, MSCA and the Montessori school-based education community to prioritise work.

Opportunity	Description	Example	Require decision now
Quick win	Smaller opportunities that can be implemented quickly and deliver some benefits in the short term	Auditing existing supports	Yes
Business as usual opportunities	Smaller opportunities that can be pursued within schools or collective as part of business as usual	School-level data curation	Yes
Short term actions	Opportunities that can be implemented relatively quickly with limited additional work (even where some benefits may take longer to be fully realised)	Quality assurance and school renewal	Probably
Long term opportunities to focus on now	Longer term opportunities that should be pursued now, including (a) require further work to confirm the detailed solution; or (b) given scale, may take time to trial and implement solution then achieve benefits	Preparation and development of educators	No, but preparatory work to start now
Long term opportunities to focus on in the future	Longer term opportunities that may be pursued later, including (a) require further work to confirm the detailed solution; or (b) work will not commence now, but, but will sometime in the future	Expansion beyond city- centric provision of schools	Not critical

Table 3.	Framework	to	assist	prioritising	work
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<sup>&</sup>lt;sup>30</sup> See: <u>K-12 Education Consulting and Strategy Services | BCG</u>

Building from Fig 13, below we offer a series of three illustrative scope of work to build from, refine, or even refute in charting a path forward.

### Systemic structures and supports

Project name: Building systemic su	upports
and structures	

### Project objectives and rationale:

- The purpose of this project is to:Review existing supports and structures provided to schools
- Initiate support structures to achieve efficiencies for schools and improve outcomes
- Prioritise data and evidence needed to advocate for Montessori education This activity will reduce duplication and

competition in provision, focus activities on supporting schools, improving outcomes, and curating evidence for advocacy.

### Immediate actions:

- Audit existing provision of supports
- Surveying desired supports

### Interdependencies:

• Review / audit will inform work plans for establishment and refinement of systemic supports and structures

#### **Project timing:**

• Commence in Q1 2022, with plan for full roll out in 2023 (if not sooner)

### High-impact schools

Project na	m <b>e:</b> Organ	nising scho	ols for high-
impact			

### Project objectives and rationale:

- The purpose of this project is to: • Establish agreed upon measures of
- Montessori education for schoolsInitiate sustainable quality assurance
- processes to Montessori
  Embed school renewal (quality improvement and reflection) in process
  This activity will establish quality assurance protocols to ensure integrity of

Montessori label but focus on school-level reflection and improvement rather than punitive measures.

### Immediate actions:

- Identify agreed upon principles of Montessori school-based education
- Developing a framework for improvement (developing, sustaining, excelling) for reflection

### Interdependencies:

- Establishing a pool or process of qualified and respected assessors **Project timing:**
- Commence in Q2 2022, with plan for full roll out in 2023

Pro	oject owner: TBD
Pro	oject scope and areas of focus:
•	Review MA, MSCA and other bodies
	strategy for supporting schools and
	advocacy for Montessori education
•	Consider school-level efficiencies and
	educational benefit of activities
Fx	pected outcomes
•	Greater efficiencies for schools
•	Enhanced outcomes in Montessori schools
•	Greater synergies and less competition
Key	<pre>/ challenges to address</pre>
•	Resistance from national bodies,
	schools, and communities
•	Establishing detailed plans for roles,
	purposes of data, and advocacy
	,, , , ,
Key	y stakeholders
•	
•	Principals' networks / associations
•	National bodies
Pro	oject resourcing requirements
•	Project team representing key groups

 Project team representing key groups (MA, MSCA, principals, schools) and expertise (e.g., academics)

### Project owner: TBD

### Project scope and areas of focus:

- Review existing quality assurance procedures in Australia and other jurisdictions
- Consider school-level efficiencies and educational value-add of activities
- Role of national bodies, costs, and sustainable pool of assessors

#### Expected outcomes

- Greater integrity in use of Montessori as an identifier
- Process for continuous improvement within and across schools
- Capacity building within the collective
- Key challenges to address
- Resistance by existing bodies
- Owner of process, including funding
- Sustainable pool of assessors

### Key stakeholders

- Schools and local communities
- Principals' networks / associations
- National bodies

#### Project resourcing requirements

• Project team representing MA, MSCA, schools,

### High-impact educators

<b>Project name:</b> Preparing and supporting high-impact educators	Project owner: TBD		
<ul> <li>Project objectives and rationale:</li> <li>The purpose of this project is to:</li> <li>Review existing teacher training (pre- and in-service) and related costing</li> </ul>	<ul> <li>Project scope and areas of focus:</li> <li>Benchmarking expectations across schools on Montessori training</li> <li>Greater consistency across schools, while respecting diverse contexts</li> </ul>		
<ul> <li>Audit school requirements for training (pre- and in-service) nationally</li> <li>Identify inconsistencies in expectations and gaps in provision</li> <li>This activity will provide the details of the expectation of educators working</li> <li>Montessori schools</li> </ul>	<ul> <li>Expected outcomes</li> <li>Greater integrity of Montessori schools</li> <li>Increased capacity of workforce, and foundation for networking and sharing</li> <li>Key challenges to address</li> <li>Availability and cost of training</li> </ul>		
Immediate actions: • Audit existing provision of Montessori	<ul><li>Inconsistent quality of providers or courses</li><li>Snobbery among community of providers</li></ul>		
<ul> <li>teacher training</li> <li>Survey schools on expectations for initial and sustained appointment</li> <li>Interdependencies: <ul> <li>The availability of appropriate training providers</li> <li>Timing and cost of training courses</li> </ul> </li> <li>Project timing: <ul> <li>Commence in Q1 2022 with reporting in Q3 in time to establish plan for 2023</li> </ul> </li> </ul>	<ul> <li>Key stakeholders</li> <li>Schools and local communities</li> <li>Principals' networks / associations</li> <li>National bodies</li> <li>Training providers</li> <li>Project resourcing requirements</li> <li>Project team representing training providers, national bodies, schools, and educators</li> </ul>		

What has been offered above are illustrative scope of work focused on three key themes identified in the data generated for this report. While the report has sought to aggregate diverse data on Montessori schools into a single document, the scopes of work constitute potential opportunities for MA, MSCA, and the Montessori school-based education community rather than a definitive policy statement.

The ideas proposed in this report are high level descriptions of potential opportunities. Drawing on publicly available data and interviews with school leaders, what has been presented is based on an initial scan of Montessori school-based education in Australia and the illustrative opportunities can be the basis of prioritisation of activities.

More detailed work is however required to both better understand the challenges and opportunities for Montessori school-based education and for the community itself to develop a collective agenda.

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