



Global Diffusion of Montessori Schools: A Report From the 2022 Global Montessori Census

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Abstract: Montessori education is distinct for its implementation in 154 countries around the world. Lacking a Montessori trademark or comprehensive overseeing body, the expansion of the Montessori approach has often been diffuse and fragmented among competing organizations. The absence of centralized, accurate, and consistent accounting has made it difficult to document the scope, growth trends, and diverse populations of students served in Montessori schools. The primary objective of this study was to gather evidence to support a robust estimate of the number of Montessori schools worldwide. This estimate relies on national and regional organizations' broadest definitions of what constitutes a Montessori program. The study included two components: a survey of regional and national Montessori organizations and supplemental sources, including other published estimates and direct inquiries within key countries. Multiple sources allowed for triangulating data to reach a more confident estimate for the number of schools in each country and for synthesizing global perspectives on significant elements of Montessori fidelity worldwide. Through these sources, we document a total of 15,763 Montessori schools around the globe, roughly 9% of which are government funded. Countries with the largest number of Montessori schools are the United States, China, Thailand, Germany, Canada, and Tanzania; the United States, Thailand, the Netherlands, and India have the largest number of government-funded or public Montessori programs. Results of the fidelity analysis identified six practices that emerge consistently as central pillars of Montessori implementation.

Montessori education is a distinctive educational pedagogy that is internationally implemented in 154 countries globally (Association Montessori Internationale [AMI], 2020). The Montessori approach spread rapidly around the world after the early success and international acclaim for Maria Montessori's first *Casa dei Bambini* in

Rome in 1907 (Whitescarver & Cossentino, 2008). In some places, schools initially grew as a result of training courses conducted by Montessori. In other places, passionate educators established Montessori schools after attending Montessori's training abroad, and in still other places missionaries and other charitable organizations

carried Montessori education into the Global South (Debs, in press). In these ways and others, Montessori seeds were globally spread: Schools were developed, and an educational movement took root. With such diverse paths of diffusion, however, Montessori education grew with little centralized organization, and no single supervising entity monitored school growth or quality.

At the same time, the lack of a Montessori trademark or a comprehensive overseeing body also means that implementation of the approach has adapted over time to local contexts, resulting in divergence between contemporary Montessori organizations that do not fully recognize others' interpretations of what constitutes Montessori education (Murray & Daoust, in press). Furthermore, the fragmented nature of Montessori growth complicates efforts to better understand issues of globally equitable access. Without accurate and consistent accounting, it is impossible to understand the reach, growth trends, and diverse populations of students served in Montessori schools.

In this study, an international research team begins addressing the information gap by creating the 2022 Global Montessori Census. This study included two components: (a) a survey of regional and national Montessori organizations to collect information in each country on the estimated number of Montessori schools, the extent to which Montessori programs are government supported, and the way in which Montessori schools are defined and (b) supplemental sources, including other published estimates and direct inquiries with contacts in key countries to obtain additional school count estimates by country. Supplemental data allowed us to triangulate multiple sources to reach a more confident estimate for each country. This analysis enables us to answer the following questions: What is the best estimate for how many Montessori schools exist in each country, what is an estimated total count of Montessori schools globally, to what extent are Montessori schools supported by government, and how are national Montessori organizations defining Montessori education in their respective countries?

Literature Review

The fact that any school can use Montessori in their name regardless of the degree to which they follow Montessori practices is an overarching challenge when obtaining an accurate accounting of schools, and this problem has deep roots in the unique history and current

landscape of Montessori education. These roots begin with the legacy and history of Montessori, continue with issues of defining current Montessori practices, and ultimately affect the field through difficulties in employing a widely accepted definition for research purposes. After addressing these uniquely Montessori challenges, we conclude the literature review with a discussion of previous efforts to count the number of Montessori schools along with similar census efforts related to other alternative education approaches.

Legacy of Montessori and Diverging Views on Defining Montessori Education in Practice

As Montessori's educational ideas began to spread and she became a popular public figure in the early 1900s, Montessori faced the challenge of public enthusiasm straining her ability to supervise efforts undertaken in her name and to maintain the authenticity of her approach. It seems likely that, even with a primary objective of quality control, her independent role outside of a university setting required her to also consider the financial implications of protecting her intellectual property (Kramer, 1976/1988).

Historians and authors have described the complicated relationships between Montessori and her proteges, as even her closest followers often became estranged (Guttek & Guttek, 2016). Since the years of the first Children's House, Montessori organizations have emerged, blossomed, and often split over philosophical disagreements about what it means to be a Montessori school (Kramer, 1976/1988; Povell, 2009). This legacy of conflict between growth and authenticity remains a fundamental aspect of Montessori education today (Murray & Daoust, in press). The result is a complex and often disconnected patchwork of Montessori organizations around the world with varying degrees of adherence to Montessori's original ideas. Pedagogical preferences of individual educators and the realities of the geographic settings and cultural contexts in which they operate contribute to this complexity.

The disconnectedness of the Montessori community leads to the absence of a universally accepted international governing body. Even so, the AMI, established by Montessori in 1929 and maintained by her son Mario Montessori, is presently among the oldest Montessori organizations and is currently the organization with the widest international scope (Quarfood, in press). AMI maintains an extensive network of Montessori organizations around the world.

Defining Montessori for Research Purposes

The ambiguity in what Montessori education entails results in different ways of implementing Montessori education (de Brouwer, 2022; Lillard & McHugh, 2019; Marshall, 2017; Murray & Daoust, in press). In fact, there are no legal protections for the name, so any school can call itself a Montessori school without applying any Montessori principles, which leads to considerable variability in how Montessori education is practiced in different schools (Lillard & McHugh, 2019). The very complexities that necessitate a comprehensive census such as this to account for Montessori schools around the world lead to challenges in determining what criteria will be used to identify schools as implementing Montessori education.

Even in studies on Montessori education, researchers have varying definitions of what constitutes Montessori education. Although more attention is now paid to the question of Montessori fidelity in research, most studies have ignored the differences in Montessori implementation and suggest that all schools express Montessori education in the same way (Murray & Daoust, in press). Research into the effectiveness of Montessori education is therefore difficult and often unclear because it is not determined in advance how and to what extent the Montessori schools participating in the research apply Montessori principles. For example, Macy et al. (2021, p. 1036) define Montessori education as a “strong focus on child-directed learning,” in line with Denervaud et al.’s (2021, p. 1) definition where Montessori education is defined as “self-directed and uninterrupted learning activities that children perform within multi-age classes.” These definitions are essentially different from Livstrom et al.’s (2018, p. 191) definition, which describes Montessori education for adolescents as “multidisciplinary and contextualized in real-world problem solving and project-based learning and inquiry.” One problem with these these definitions is that they focus on the setting where Montessori education is being implemented, ranging from Early Childhood to Secondary schools, which results in varying definitions of Montessori education.

To overcome the problem of the ambiguity in the definition of Montessori education, most studies describe Montessori’s historical background or Montessori key principles (e.g., Marshall, 2017). Some studies illustrate both, such as Gasco-Txabarri and Zuazagoitia (2022) defining Montessori education as the following:

The Montessori method, considered a nonconventional teaching method, is characterized by recognizing the interest and needs of students, allowing their personal choice; reinforcing self-motivated, active and autonomous, as well as collaborative, learning by mixing students of different ages; facilitating the manipulation and understanding of materials; developing self-control; respecting freedom and teaching responsibility; encouraging creativity; avoiding extrinsic motivation; not rewarding success; and encouraging trial-error techniques in tasks, among other characteristics. (p. 2)

Such definitions still vary across studies, resulting in challenges in comparisons across schools and determining standard end results.

In the Montessori community and across research, the challenge of defining Montessori education and determining which schools are practicing it makes the effort to develop a census of Montessori schools a significant challenge, which we discuss in the Methods section.

Counting Montessori and Other Alternative Pedagogies

Recognizing some of the underlying challenges in developing a uniform definition of Montessori schools, efforts have occurred internationally and in the United States to find common ground and to collaborate to tally the number of Montessori schools. Globally, this effort was led by the AMI cooperating with several Montessori organizations to create a 2006 estimate of 22,000 Montessori schools around the world as part of a celebration of the centenary of Montessori’s birth (AMI, 2021), although country-specific documentation was available for only two countries, the United Kingdom and Australia (AMI, 2006). In 2020, AMI reported Montessori schools being found in 148 countries (AMI, 2020).

Similarly, American Montessori organizations have begun an ongoing collaboration, producing and maintaining a national count of Montessori schools through a Montessori organization—the National Center for Montessori in the Public Sector (NCMPS)—formed in collaboration with several existing Montessori organizations. The U.S. Montessori census was launched in 2013 as a collaboration with the National Center for Montessori in the Public Sector, the Center for

Research on Developmental Education, and multiple Montessori organizations within the United States. Funding was initially provided by the Trust for Learning, and NCMPS now maintains the database with ongoing efforts at improving data collection and communication (NCMPS, n.d.). A total of 2,728 Montessori schools have participated in the U.S. Montessori census to date (NCMPS, n.d.); of these schools, 579 are publicly funded programs. The U.S. Montessori census offers school leaders the opportunity to maintain and update their own information. This effort assists researchers, policymakers, and parents in learning about Montessori both nationally and in their communities.

The Center for Guided Montessori Studies (CGMS), a U.S.-based online training program affiliated with the Montessori Foundation, developed a Global Montessori Schools census resource that is composed of a listing of individual schools that call themselves “Montessori” (CGMS, n.d.). The organizations acknowledge that the database is limited because no evidence of authenticity is included and because their process of locating schools relies on internet searches and existing lists that are unlikely to be complete (M. Seldin, personal communication, July 13, 2022). Other countries have lists of affiliated schools shared online, but no rigorous global accounting of Montessori schools currently exists (see, e.g., Montessori Aotearoa New Zealand, 2022; Opera Nazionale Montessori, n.d.; South African Montessori Association, n.d.).

Other alternative educational approaches maintain records about the schools around the world implementing their pedagogy and the organizations that represent them. Often, these organizations are smaller or have more centrally organized structures. For example, the International Baccalaureate (IB) organization authorizes member schools and provides a website with “facts and figures” about IB schools and programs around the world; the organization estimates around 3,600 programs as of 2020 (IB, 2020). The Waldorf Worldwide organization provides a complete list of schools and teacher training centers around the world, which allows an easy accounting of the program’s reach through 1,857 schools in 70 countries (Waldorf Worldwide, 2022). Ascertaining the number of schools implementing a Reggio Emilia–inspired approach is more difficult because clear standards and criteria for what constitutes such schools is perhaps even less defined than for Montessori education (Landi & Pintus, 2022). The Reggio Emilia Approach has organized an international network of representatives with established programs

and reports to have affiliations with around 30 centers worldwide, although it is unclear how many schools exist globally (Reggio Emilia Approach, 2022). The North America Reggio Emilia Alliance is currently conducting its own census project but reports 1,200 individual members, including educators and advocates (North American Reggio Emilia Alliance, 2022). Similar efforts to consolidate information about Montessori schools and organizations globally is much more complex because of the number, diversity, and regional overlap of Montessori institutions.

Methods

Findings reported in this article are based on multiple data sources with two primary components: a survey of regional and national Montessori organizations and supplemental sources, including other published estimates and direct inquiries within key countries. This section outlines the methodological aspects of these data sources.

Survey of Montessori National and Regional Organizations

To answer our research questions, we relied first on responses from representatives of national Montessori organizations. We developed an original Qualtrics online survey to obtain estimates of the number of schools and the degree of government support along with additional information about the organizations and Montessori education in their respective countries or regions (Appendix A). In asking organizational representatives to provide initial country-level estimates of the number of Montessori schools based on the way they define them in their countries, we recognize that some variations from country to country and across organizations may occur. More discussion about variation in defining Montessori education across countries is provided in the subsequent Survey Development section. The survey was English language–based and relied on national organizations and schools with email access, which potentially limited the participation of non-English speaking educators and may have undercounted grassroots organizations.

Survey Development

A primary focus of the survey was obtaining a count of Montessori schools; we decided to be as inclusive as possible in defining the criteria to be counted, recognizing that Montessori practices vary by organization and across countries. This approach is consistent with the

“wide-tent” approach of the AMI’s global census in 2006. Therefore, the survey asked Montessori organization representatives, “What is the estimate of the total number of Montessori schools in your organization’s primary country, regardless of whether they are currently members of your organization? (Please use the broadest definition for what you consider to be Montessori schools.)” Other components of the survey addressed information describing the various ways of associating with the national organization, involvement of nongovernmental organizations in operating Montessori schools, availability of government-funded schools, and the number of teacher training programs. A list of reported survey questions is available in Appendix A.

Survey Distribution

Working with AMI and their extensive network of international contacts, we developed a list of 201 regional and country Montessori organizations and researchers operating in 154 countries. The initial invitation to complete the survey was distributed by AMI to only 192 individuals because nine of the original 201 email addresses were invalid and the invitation could not be delivered. AMI sent three email reminders to participate, and subsequent outreach was conducted through three additional attempts via email by a member of the research team. We intentionally emailed the survey to multiple Montessori organizations in each country when possible

to triangulate estimates within countries.

Survey Response Rate

Eighty-one representatives from Montessori organizations completed the survey, which represents 59 countries and reflects a 42.2% response rate. Table 1 lists the countries for which organizations responded to the survey.

Supplemental Data Sources

We leveraged supplemental data sources for two distinct purposes. First, we identified data sources to supplement the country count data for countries where we had missing or conflicting information from the survey. Second, we incorporated data from national Montessori organizations worldwide to understand the ways in which they define quality Montessori practices. Details about our approach to these two supplemental data sources follow.

Supplemental Data for Country Counts

Expanding on the data obtained in the survey of national and regional Montessori organizations, we also triangulated data from several additional data sources to fill in missing information and to verify the count estimates. As of 2022, the U.S.-based Center for Guided Montessori Studies Global Montessori Schools census included 8,686 schools worldwide (CGMS, n.d.). The

Table 1
Countries Represented by Survey Respondents

Europe	Africa	Middle East	Asia	Oceania	North & Central America	South America
Albania	Algeria	Lebanon	Armenia	Australia	Canada	Argentina
Austria	Ethiopia	Pakistan	Azerbaijan	New Zealand	Haiti	Brazil
Belarus	The Gambia	United Arab	Brunei		Honduras	Colombia
Bulgaria	Ghana	Emirates	Darussalam		Mexico	Chile
Estonia	Kenya		China		United States of	Paraguay
France	Morocco		India		America	
Germany	Nigeria		Indonesia			
Greece	South Africa		Japan			
Italy	Tanzania		Malaysia			
Latvia	Tunisia		Mongolia			
Netherlands	Uganda		Russian			
Norway	Zimbabwe		Federation			
Poland			Thailand			
Portugal			Vietnam			
Romania						
Slovenia						
Spain						
Switzerland						
Turkey						
United Kingdom						
of Great						
Britain and						
Northern						
Ireland						

CGMS census is a publicly available list updated every several years that includes self-reported Montessori schools without verifying Montessori fidelity. The CGMS staff rely on internet searches and organizational connections to locate Montessori schools to conduct outreach for marketing purposes. In addition, we incorporated counts from the U.S. Montessori census, which is maintained and updated annually by the National Center for Montessori in the Public Sector and provides a breakdown of private and publicly funded Montessori programs (NCMPS, n.d.).

Finally, when we were aware of the existence of Montessori schools within a country where we had no counts from the survey or other census sources or those sources differed significantly, we contacted local researchers for an informed estimate and to gauge the degree of government support for Montessori schools. In some cases, we incorporated counts provided by authors of country profiles for Bloomsbury's *Handbook of Montessori Education* (Debs, in press) or national Montessori association websites when available. We supplemented information from 12 additional contacts in specific countries.

Supplemental Data for Montessori Practices

To better understand the implications of the broad approach that we used in defining what constitutes a Montessori school, we examined the variability or consistency in the Montessori definition and practice across countries by comparing a sample of 14 national and regional Montessori organizations around the world to see how they define a Montessori school. We consulted the following organizations in countries with a significant Montessori infrastructure to have a sample from different regions of the world: South African Montessori Association, International Montessori Foundation, American Montessori Society, AMI-USA, Montessori Public Policy Initiative, Organização Montessori do Brasil, Montessori for Kenya, Indian Montessori Foundation (affiliated with AMI), Indian Montessori Centre, Montessori Mexico (affiliated with AMI), Montessori Deutschland, Montessori Australia, Montessori Aotearoa New Zealand, and Montessori Europe (for a list of organizations and their links, see Appendix B).

Analysis

Arriving at the estimates of the number of Montessori schools in each country required more complex analyses because multiple data sources were

involved. Details of the analysis process are detailed separately for the single-source data and the triangulated data in the two sections that follow.

Single-Source Data Analysis

Analysis of survey data involved descriptive statistics, including means, standard deviations, and frequency counts of the 81 responses using IBM Statistics v. 28. The Montessori practices data from the 14 organizational sources listed in Appendix B were collected and sorted in Microsoft Excel to identify themes and common criteria across the organizations. This analysis provided the basis for the discussion of Montessori practices in the Results section and informed the items included in the survey related to Montessori practices.

Triangulation Process

We describe the multiphase process of estimating the counts of Montessori schools in individual countries in the following paragraphs. First, we cross-checked country number counts from survey responses with the CGMS census along with estimates from our outreach efforts. We gave more weight to estimates that came from more well-documented sources or when the figure was based on an explicit list. In a number of cases, we obtained different Montessori school count estimates from multiple organizations in the same country and, in several cases, significant differences between different members of the same organization. Wide variation on country counts occurred for Canada, China, Japan, Kenya, Nigeria, and Turkey. In these cases, we created a country estimate that was roughly the midpoint of all the estimates, with more weight given to higher quality data sources. In some locations, such as Tanzania and Canada, we took the midpoint of several estimates, but the Turkey and China examples provide context for understanding the types of challenges we faced for some countries.

In Turkey, an initial survey respondent gave an estimate of 3,000 Montessori schools in the country. Additional outreach gave us estimates of 500–700 schools, 50–150 schools, and a list of 49 Montessori schools considered to be of high quality (which included a note that several schools call themselves Montessori schools without significant connections to the pedagogy). Based on the additional contextual information from the outreach, we ultimately made a generous estimate of 300 Montessori schools in Turkey.

We also had a wide range of estimates in China, which highlighted the importance of understanding local country context, particularly in a changing policy

landscape. A training institute estimated a low figure of 200 Montessori schools in China, a national Montessori association estimated 1,000 schools, an educator at a training center estimated 1,000–1,300, and a Montessori researcher on China estimated 5,000–6,000 schools based on her data collection efforts. The landscape of Montessori education in China is changing rapidly; the Chinese government is enforcing tuition caps and providing subsidies for preschools attached to local housing communities, which has led to curriculum regulation and the conversion of several Montessori preschools to traditional preschools (A. Chen, personal communication, September 7, 2022). Given this uncertain policy landscape, we ultimately estimated 1,100 Montessori schools in China, a figure that needs additional monitoring and revision as the landscape changes.

Another important goal for this census project was to gauge the degree of governmental support for Montessori schools around the world. Yet, as was the case with estimates of the total number of Montessori schools in a country, significant variation in responses about government-funded or public Montessori programs also occurred. The discrepancies may have reflected some combination of varying country contexts and unclear wording of our question. When we asked, “How many Montessori schools in your primary country are government funded?” we intended to refer to schools that receive their full funding from government sources, but respondents may have interpreted this question to mean private schools that receive some degree of government funding.

To develop an estimate about the number of Montessori schools receiving full government funding, we incorporated information from the supplemental data sources along with the survey responses to also triangulate estimates of government-sponsored Montessori programs.

Results

The Results section is divided into three parts. The first part provides findings that address the primary question about the number of schools in existence worldwide, along with the degree of government-supported schools. The second part provides more in-depth analysis from the survey responses about their organization’s structure and the extent of Montessori teacher education programs. The third part includes a synthesis of Montessori practices described by national

and regional Montessori organizations worldwide who responded to the survey, along with an analysis of leading international Montessori organization perspectives based on their websites.

Global Count of Montessori Schools

Recognizing that our data collection efforts may be limited and that several countries may be undercounted, in this 2022 Global Montessori Census, we document a total of 15,763 Montessori schools around the globe using our triangulated data sources, and we estimate that roughly 9% of these are fully government funded. Countries with the largest number of Montessori schools are the United States, China, Thailand, Germany, Canada, and Tanzania; the United States, Thailand, the Netherlands, and India have the largest number of government-funded or public Montessori programs. As is evident in Figure 1, Montessori education has spread worldwide, with concentrations in large countries on almost all continents. Appendix C details the estimated counts determined for each country based on our analysis.

The estimate of entirely publicly funded Montessori schools, 9%, is based on supplemental data described in the Methods section along with responses to the survey of national Montessori organizations. Survey respondents also indicated an additional number of private schools receiving some form of government funding. Although the survey covers a limited number of countries and organizations, it provides a glimpse of the extent of government support of Montessori schools around the world.

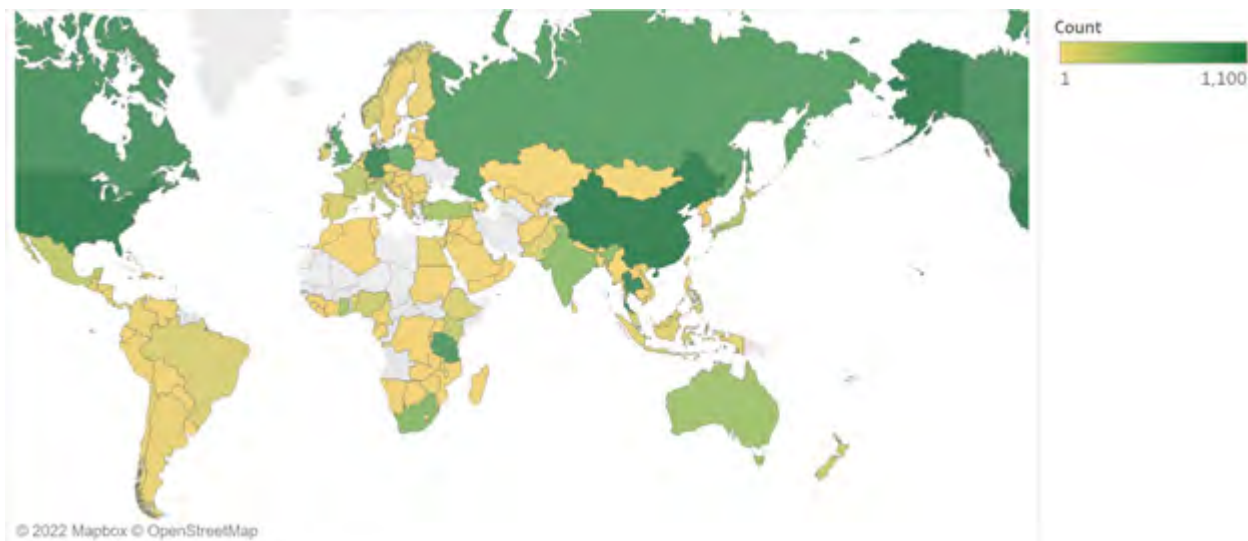
Survey of Montessori National and Regional Organizations

Although not comprehensive, the 81 national and regional Montessori organization survey responses from 59 countries provide more insight than a simple count of schools, so here we present the survey results related to the structure of these Montessori organizations and the availability of teacher education programs in their respective countries.

Organizations report offering a variety of ways that schools connect with them, with almost half (44.9%) indicating that they offer different tiers of connection. Six in ten organizations reported allowing some level of connection that is open to any school (61.0%). Meeting specific criteria with verification was reported by less than half of organizations (40.3%), with only one-quarter

Figure 1

Estimated Counts of Montessori Schools by Country



Note. Scale ranges from yellow for the lowest numbers to dark green for the highest numbers (1,100+). Gray represents countries where no data exists. An interactive map is available at <https://public.tableau.com/views/GlobalMontessoriCensus2022/MontessoriCensusMap>.

allowing schools to sign up by paying a membership fee (27.3%). A much smaller proportion (13.0%) indicated that they offer a membership level with specific criteria but without verification. Much can be learned about how national and regional Montessori organizations around the world define the options they extend for schools to become members. These levels of membership are often connected to the definitions of Montessori education on which the respective organizations rely and is the topic of the next section.

We also asked national and regional Montessori organizations about any connected Montessori teacher education programs, and two-thirds reported having such programs (65.3%). The largest number of these organizations reported that the training centers were affiliated with AMI (61.1%); however, less than half reported that their training programs were independent (40.3%). No other training entities were mentioned by more than 20% of participants.

Synthesis of Current Definitions of Montessori Education

Our data-gathering efforts provide an opportunity to shed light on the similarities and differences in how Montessori education is defined in various geographic locations. In our sample of 14 national Montessori organization websites and through data from survey respondents, we found that although many national member organizations have an orientation toward being

inclusive and welcoming, some national organizations are also in the process of developing quality criteria that would designate tiers of recognition of Montessori practice. Details of national-level definitions of what constitutes a Montessori school ranged widely across countries but repeatedly included a focus on the specifics of Montessori classroom practice and an emphasis on the broader philosophical orientation of the classroom. In some cases, national definitions leaned more toward Montessori practice, whereas others placed more emphasis on Montessori philosophy and, in some cases, both were included (e.g., Montessori Deutschland, Montessori Aotearoa New Zealand).

Despite these variations, we found overall consistency across country definitions in the following categories for focusing on these six ideas and practices as central pillars of Montessori implementation:

- Supporting Montessori philosophy
- Mixed-age groupings
- Montessori-trained teachers
- Montessori materials
- Freedom of choice
- Uninterrupted work block

These consistent definitions suggest that a common agreement occurs across numerous Montessori organizations regarding these broad pedagogical practices required of Montessori schools.

As we mentioned in our analysis of Montessori

Table 2
To What Extent Do the Characteristics of Montessori Education Apply to the Schools Connected With Your Organization in Your Primary Country?

	Never				Always
Mixed age grouping	1.33	5.33	10.67	21.33	61.33
Children use Montessori materials	1.35	2.70	10.81	25.68	59.46
Children have freedom of choice	1.35	6.76	12.16	28.38	51.35
Montessori-trained teachers	1.35	5.41	24.32	20.27	48.65
Uninterrupted work cycle	1.35	14.86	25.68	16.22	41.89

Note. N = 74–75; percentage reporting.

definitions from national and regional Montessori organizations, the survey asked participants about the degree to which schools in their country follow Montessori philosophy and engage in the five key practices previously identified (Table 2). Results suggest that the most consistently implemented practice is mixed-age groupings, followed by children using the materials. Roughly half of organizations report that schools connected to their organizations “always” have freedom of choice and Montessori-trained teachers. The least consistent characteristic was offering an uninterrupted work cycle.

Having outlined the results from the various sources of data, we conclude with a discussion of the implications of this work, limitations of the data collected, and directions for future research.

Discussion

This study provides a frame of reference for those wanting to gauge the spread of Montessori education around the globe, with an estimate of 15,763 schools as of 2022. This estimate further supports claims that Montessori education represents the largest global alternative educational approach when compared with estimates of the numbers of schools implementing other approaches such as IB (3,600), Waldorf (1,857), and Reggio Emilia–inspired schools (1,200 members of the North American Reggio Alliance).

We have gathered survey data and consulted a range of additional data sources; however, this 2022 Global Montessori Census clearly has limitations. The survey was English language–based and relied on national organization websites, potentially ignoring grassroots schools using local languages. Initially, the survey was sent by AMI, an organization that has wide international reach, but it represents one part of the Montessori community. In addition, national and regional Montessori organizations can be unstable, with possible shifts in leadership and degree of representativeness over time. Ideally, future iterations of this project will include lists

of schools and broader outreach rather than just school counts and will coordinate with volunteers using local languages. We were able to arrive at a rough estimate of 9% of global Montessori schools being fully government funded. Additional questions around government schools versus private schools with some public funding, along with a better assessment of access and equity through data on public funding and the demographics of students served, will be necessary to truly understand the degree to which Montessori education serves a socioeconomically diverse population of students.

Ultimately, the 2022 Global Montessori Census provides a valuable resource for families, educators, researchers, and policymakers to better understand Montessori education’s reach, growth trajectory, and global diversity. Currently, no such comprehensive accounting exists, which results in inaccurate estimates of the prevalence of Montessori schools or gaps in knowledge about Montessori education’s global presence. By creating an empirical source of Montessori school data worldwide, we are providing a stable reference that overcomes the fragmented organizational landscape that is further complicated by national boundaries.

This 2022 Global Montessori Census offers an empirically based estimate of the prevalence of Montessori schools around the world. Given the diffusion and diversity of Montessori education globally, accurate and consistent accounting is challenging, but necessary, to understand the reach, growth trends, and diverse populations of students served in Montessori schools. Using data collected from international, national, and regional Montessori organizations, we estimate in the 2022 Global Montessori Census a total of 15,763 Montessori schools worldwide, with roughly 9% of them being government funded. We also documented similarities and differences in how national and regional Montessori organizations define Montessori education in their countries, which provides a basis for future, more granular accounting of schools. We acknowledge that although this estimate is based on multiple data sources, outreach to additional sources in the future could

increase the rigor of the count obtained, particularly with respect to government-funded and public Montessori schools. Furthermore, the definition of what constitutes a Montessori school in each country needs to be more fully examined. Although much remains to be learned about Montessori education worldwide, this project represents a valuable and stable resource for the field.

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References

- Association Montessori Internationale. (2021). *2021 annual report*. <https://montessori-ami.org/news/2021-annual-report>
- Association Montessori Internationale. (2020). *Montessori countries in 2020*. Annual General Meeting [remote].
- Association Montessori Internationale. (2006). *Montessori worldwide*. <http://montessoricentenary.org/>
- Center for Guided Montessori Studies. (n.d.). *Global Montessori schools census*. <http://schools.guidedstudies.com/search/info.php>
- de Brouwer, J., Mattijssen, E., & Stefels, M. (2022). Reflections on Montessori in the Netherlands: Fidelity—adaptation debate. In J. De Brouwer & P. H. M. Sins (Eds.), *Perspectives on Montessori*. Saxion Progressive Education University Press.
- Debs, M. (In press). Introduction: Global Montessori education. In A.K. Murray, E-M. T. Ahlquist, M. McKenna, & M. Debs (Eds.), *Handbook of Montessori Education*. Bloomsbury. [Publication date April 6, 2023]
- Denervaud, S., Christensen, A. P., Kenett, Y. N., & Beaty, R. E. (2021). Education shapes the structure of semantic memory and impacts creative thinking. *npj Science Learn*, 6(35). <https://doi.org/10.1038/s41539-021-00113-8>
- Gasco-Txabarri, J., & Zuazagoitia, D. (2022). The sense of patterns and patterns in the senses. An approach to the sensory area of a Montessori preschool classroom. *Education*, 3–13. <https://doi.org/10.1080/03004279.2022.2032786>
- Gutek, G. L., & Gutek, P. A. (2016). *Bringing Montessori to America: SS McClure, Maria Montessori, and the campaign to publicize Montessori education*. University of Alabama Press.
- International Baccalaureate (IB). (2020). *Facts and figures*. <https://www.ibo.org/about-the-ib/facts-and-figures/>
- Kramer, R. (1976/1988). *Maria Montessori: A biography*. Addison Wesley.
- Landi, L., & Pintus, A. (2022). A critical approach to the Reggio Emilia Approach. *Educazione. Giornale di pedagogia critica*, 11(1).
- Lillard, A. S., & McHugh, V. (2019). Authentic Montessori: The Dottoressa's view at the end of her life part I: The environment. *Journal of Montessori Research*, 5(1), 1–18. <https://doi.org/10.17161/jomr.v5i1.7716>
- Livstrom, I. C., Szostkowski, A. H., & Roehrig, G. H. (2018). Integrated STEM in practice: Learning from Montessori philosophies and practices. *School Science and Mathematics*, 119, 190–202. <https://doi.org/10.1111/ssm.12331>
- Macy, M., Pool, J., Chen, C. I., Rusiana, T., & Sawyer, M. (2021). A preliminary examination of a kindergarten school readiness assessment. *Early Childhood Education Journal*, 50, 1035–1046. <https://doi.org/10.1007/s10643-021-01237-7>
- Marshall, C. (2017). Montessori education: A review of the evidence base. *npj Science of Learning*, 2(11), 1–11. <https://doi.org/10.1038/s41539-017-0012-7>
- Montessori Aotearoa New Zealand. (2022). *Montessori in Aotearoa New Zealand*. <https://www.montessori.org.nz/montessori/montessori-new-zealand/>

- Murray, A. K., & Daoust, C. (in press). Fidelity issues in Montessori research. In *Handbook of Montessori Education*. Murray, A. K., Ahlquist, E-M. T., McKenna, M., & Debs, M. (Eds). Bloomsbury Publishing. [Publication date April 6, 2023]
- National Center for Montessori in the Public Sector. (n.d.). *Montessori census*. <https://www.montessoricensus.org/>
- North American Reggio Emilia Alliance. (2022). *Census*. <https://www.reggioalliance.org/census/>
- Opera Nazionale Montessori. (n.d.). *Nidi e scuole Montessori in Italia* [Montessori schools and day care centers in Italy]. <https://www.operanazionalemontessori.it/nidi-e-scuole-montessori/nidi-e-scuole-montessori-in-italia#>
- Povell, P. (2009). *Montessori comes to America: The leadership of Maria Montessori and Nancy McCormick Rambusch*. University Press of America.
- Quarfood, C. (In press). Maria Montessori: Life and historical context. In A. K. Murray, E-M. T. Ahlquist, M. McKenna, & M. Debs (Eds.), *Handbook of Montessori education*. Bloomsbury. [Publication date April 6, 2023]
- Reggio Emilia Approach. (2022). *Network*. <https://www.reggiochildren.it/en/reggio-emilia-approach/network-en/>
- South African Montessori Association. (2022). *SAMA schools*. <https://samontessori.org.za/category/sama-schools/>
- Waldorf Worldwide/Freunde der Erziehungskunst Rudolf Steiners. (2022). *Waldorf World list*. <https://www.freunde-waldorf.de/en/waldorf-worldwide/waldorf-education/waldorf-world-list/>
- Whitescarver, K., & Cossentino, J. (2008). Montessori and the mainstream: A century of reform on the margins. *Teachers College Record*, 110(12), 2571–2600. <https://doi.org/10.1177/016146810811001202>

Appendix A
Selected Questions From the Global Montessori Survey

- What is the name of your national/regional Montessori organization?
- What country does your organization cover?
- How can schools connect with your Montessori organization? (Select all that apply.)
- Do you have different levels/tiers for schools connected to your organization based on Montessori implementation?
 - What is the estimate of the total number of Montessori schools in your organization's primary country, regardless of whether they are currently members of your organization? (Please use the broadest definition for what you consider to be Montessori schools.)
 - How many Montessori schools in your primary country are government funded?
 - How many Montessori teacher training centers are available in your primary country?
 - Which of the following affiliations do the training centers in your primary country have? (Select all that apply.)
 - To what extent do the following characteristics of Montessori education apply to the schools connected with your organization in your primary country?
 - Mixed age grouping
 - Montessori-trained teachers
 - Children use Montessori materials
 - Children have freedom of choice
 - Uninterrupted work cycle
 - How, if at all, does your organization monitor the Montessori implementation in schools connected to your organization in your primary country? (Select all that apply.)

Appendix B

Defining and Including Montessori Schools, Organizations Consulted

American Montessori International-USA—Standards for AMI Montessori classrooms: <https://amiusa.org/schools/standards-for-ami-montessori-classrooms/>

American Montessori Society—5 core components of Montessori education: <https://amshq.org/About-Montessori/What-Is-Montessori/Core-Components-of-Montessori>

Indian Montessori Centre: <https://www.indianmontessoricentre.org/>

Indian Montessori Foundation—Montessori schools: <https://montessori-india.org/montessorischools/>

International Montessori Foundation—Six principles of Montessori education, as defined by Nancy McCormick Rambusch and John Stoops in 1992

Montessori Aotearoa New Zealand—Montessori Journey to Excellence (MJ2Ex) Te Ara Ki Hihuatanga: Essential elements: <http://www.montessori.org.nz/professionals/journey-excellence/>

Montessori Australia—Montessori quality: Authentic practice: <https://static1.squarespace.com/static/6072dc974fd9550c4c8b1891/t/612f061741e7f022ceb6c562/1630471741376/MQAPBrochure.pdf>

Montessori Deutschland—Quality framework document: <https://www.montessori-deutschland.de/assets/Dokumente/QR-V2.0.4-Grundlegendokument.pdf>

Montessori Europe—Connecting Montessorians in Europe and beyond: <https://www.montessori-europe.net/>

Montessori for Kenya—Montessori: <https://www.montessoriforkenya.org/about-montessori/>

Montessori Mexico: <https://www.montessorimx.com/>

Montessori Public Policy Initiative:—Montessori essentials: <https://montessoriadvocacy.org/wp-content/uploads/2019/07/MontessoriEssentials.pdf>

Organização Montessori do Brasil: <http://omb.org.br/>

South African Montessori Association: <https://samontessori.org.za/sama-fundamental-principles/>

Appendix C
School Counts by Country

Country name	Total estimate	Country name	Total estimate
Afghanistan	1	Hungary	7
Albania	2	India	417
Algeria	4	Indonesia	65
American Samoa	2	Iraq	2
Antigua and Barbuda	1	Ireland	81
Argentina	40	Israel	1
Armenia	9	Italy	243
Aruba	4	Jamaica	1
Australia	345	Japan	260
Austria	106	Jordan	1
Azerbaijan	4	Kazakhstan	1
Bahamas	1	Kenya	200
Bahrain	5	Kosovo	2
Bangladesh	3	Kuwait	10
Barbados	3	Lao People's Democratic Republic	3
Belarus	3	Latvia	32
Belgium	8	Lebanon	10
Belize	1	Lesotho	1
Benin	6	Liberia	1
Bermuda	1	Lithuania	2
Bhutan	1	Luxembourg	18
Bolivia	9	Macau	1
Bosnia and Herzegovina	6	Macedonia	1
Botswana	1	Madagascar	2
Brazil	110	Malawi	13
Brunei Darussalam	1	Malaysia	80
Bulgaria	40	Martinique	1
Burundi	1	Mexico	200
Cambodia	7	Mongolia	4
Cameroon	1	Morocco	1
Canada	900	Mozambique	2
Cayman Islands	5	Myanmar	4
Chile	60	Namibia	16
China	1,100	Nepal	19
Colombia	40	Netherlands	223
Costa Rica	46	New Zealand	169
Cote d'Ivoire	1	Nicaragua	7
Croatia	6	Nigeria	150
Cyprus	8	North Korea	1
Czech Republic	34	Norway	130
Democratic Republic of the Congo	3	Oman	1
Denmark	3	Pakistan	100
Dominica	1	Palau	1
Dominican Republic	16	Panama	7
Ecuador	6	Paraguay	6
Egypt	60	Peru	17
El Salvador	4	Philippines	45
Equatorial Guinea	1	Poland	600
Estonia	12	Portugal	20
Ethiopia	110	Qatar	3
Fiji	1	Romania	50
Finland	34	Russian Federation	750
France	225	Rwanda	2
Gabon	1	Saint Kitts and Nevis	3
The Gambia	13	Saint Lucia	3
Germany	1,000	Saudi Arabia	6
Ghana	300	Serbia	3
Greece	50	Seychelles	2
Grenada	1	Sierra Leone	1
Guam	1	Singapore	63
Guatemala	13	Slovakia	2
Guinea	1	Slovenia	35
Haiti	50	South Africa	450
Honduras	10	South Korea	15
Hong Kong (S.A.R.)	7	Spain	120

Country name	Total estimate
Sri Lanka	5
Sudan	1
Swaziland	2
Sweden	35
Switzerland	120
Syrian Arab Republic	1
Taiwan	60
Tanzania, United Republic of	800
Thailand	1,000
Trinidad and Tobago	2
Tunisia	1
Turkey	300
Uganda	10
United Arab Emirates	30
United Kingdom of Great Britain and Northern Ireland	700
United States of America	3,025
Uruguay	4
Uzbekistan	1
Venezuela, Bolivarian Republic of	3
Viet Nam	80
Virgin Islands (British)	1
Yemen	1
Zambia	15
Zimbabwe	30
Total	15,763