What is Montessori-Inspired Practice?

Key Ideas

- Montessori-Inspired practice refers to a constellation of instructional moves that originated in Montessori classrooms but are distinct from Montessori as a complete educational model.

- While much of the benefit of the Montessori model emerges from the highly detailed and coherent nature of the system, select elements are exportable and effective either in isolation or in combination with other developmental practices.

- Successful Montessori-Inspired practice calls for blending a child-centered, developmentalist orientation with specific pedagogical moves consistent with the orientation.

The Developmental Orientation

Montessori education is a developmental model grounded in three empirically derived premises. First, human development is a natural, staged process, beginning at birth and extending into one's early twenties. Development is natural, effortful, and, when appropriately supported, joyful. Second, human beings are born with nearly limitless potential. Third, schooling should be designed explicitly to foster the natural, effortful, and joyful process of development, in the service of realizing human potential.

These premises are visible in an array of pedagogical models. In addition to Montessori, approaches such as Waldorf, Project-Based, Tools of the Mind, and Reggio-Inspired all embrace a child-centered, personalized, developmental orientation[1]. They also embrace a broader definition of educational success. In addition to a focus on wide-scope outcomes, including executive functions, social and emotional learning as necessary for effective academic learning, these approaches call for an assessment framework in which inputs (the attributes of learning environments) and outcomes (what children know and can do as a result of those learning environments) are closely aligned.

Programs, especially early childhood programs, that share a developmental orientation are more likely to successfully implement Montessori-Inspired practice.

The Fidelity Continuum: What Is and Isn't Exportable

As Montessori education continues to gain popularity, so does the push to extract elements of the model to bolster quality and appeal in other approaches.[2] Similar to other ambitious educational models, research on Montessori strongly correlates superior outcomes for students with high-fidelity implementation.[3]

At the same time, certain pedagogical features of Montessori have also been shown to improve learning independent of Montessori classrooms.[4] In fact, many elements now considered standard for early childhood and elementary learning environments—child-sized furniture, manipulative materials, emphasis on exploration and discovery—originated in Montessori classrooms over a century ago.

Over the course of seven years working with a range of public Montessori schools, NCMPS has developed two tools, the _Essential Elements Rubric_ (EER) and the _Developmental Environmental Rating Scale_ (DERS), to better understand a continuum of practice that ranges from Full Implementation to Montessori-Inspired.

Transitional Montessori   Montessori Aspiring

Full Implementation   Montessori-Inspired

For schools wishing to call themselves Montessori, full implementation is always the goal[5]. To that end, the EER both defines full implementation and acknowledges the continuum of practice all schools experience. This is particularly true for public Montessori schools, which operate within a policy environment that is not always amenable to the schedules, staffing models, and financial investments necessary to achieve full implementation. Features such as three-year age spans, full complements of Montessori materials, and teachers who have completed an accredited Montessori training program are fidelity elements that may take time and require school-level strategy to realize.

The DERS, by contrast, focuses on classroom attributes that have been shown to support wide-scope developmental outcomes such as executive functions (EFs), linguistic and cultural fluency, and social fluency and emotional flexibility[6]. Because the tool is inspired by the specificity of Montessori practice and refers directly to attributes such as the absence of clutter, access to nature, conversational teacher talk, and opportunities for trial and error, it is used widely by Montessori practitioners to support continuous improvement. At the same time, DERS draws its content validity from research on human development, which makes it both an effective measure of developmental practice more broadly conceived and an ideal measure of Montessori-Inspired practice.

It's worth underscoring that Montessori-Inspired practice is not the same thing as Montessori practice. Indeed, the hallmark of the highest quality Montessori implementation is an unusual degree of both specificity and coherence characterizing what some call the "instructional core".[7] Breaking up the system comes with risks. Still, we think those risks can be mitigated by combining an understanding of the hallmarks of high-fidelity Montessori implementation with the research base that validates specific elements of Montessori pedagogy.

Pedagogical Features of Montessori-Inspired Practice

The features below are examples of environmental attributes that are core to Montessori practice yet may be successfully exported:

Montessori-Inspired Learning Environments

- **Accommodate free movement and voluntary social activity** through classrooms that are large and intentionally dynamic, including a variety of furniture arrangements (tables, rugs, and shelves that are accessible to children).
- **Contain carefully curated sets of hands-on materials** designed to isolate key skills, enable exploration, experimentation and, self-correction.
- **Limit visual and aural stimulation**, so as to enable extended focus on self-chosen activity.
- **Contain mixed-age groups of children**, usually in cohorts of at least 25, so as to:
  - Allow individualized pacing through a multi-year spectrum of challenge.
  - Offer repeated experiences with materials.
  - Encourage student-to-student support, minimizing dependence on adults.
  - Minimize peer-to-peer comparison.

Implementing Montessori-Inspired practice depends almost entirely on adults who have been appropriately oriented in both the core precepts of developmental learning and the technical skills required to manage student-centered, personalized learning environments. Below are key skills Montessori-Inspired teachers deploy:

> **Montessori-Inspired Teachers**
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> - **Are expert observers of children**, building focused observation into their daily practice, and base all instructional decisions on observed interest and readiness in individual children.
> - **Rarely deliver whole-group instruction**; rather, they are skilled at offering small-group or one-on-one lessons.
> - **Assume the role of link between child and environment** rather than source of knowledge, by
>   - cultivating an intentional speaking register designed to model naturalistic conversation rather than didactic "teacher talk."
>   - speaking to children at eye level rather than calling across the room.
> - **Model friendliness with error** and cultivate a classroom culture of exploration and experimentation—most often manifest as intentional neutrality with regard to response to student work, e.g.: resistance to extrinsic rewards, encouraging risk-taking effort.

Avoiding the Pitfalls of Montessori Light

Occasionally, we are asked to assist programs in providing "a light touch" of Montessori. Typically, this involves a request to insert selected materials and lessons into an existing schedule, framework or orientation. For instance, Montessori mathematics materials are often perceived as effective tools for teaching key math concepts, and some operators see their inclusion as a path toward higher student performance.

This decontextualized strategy, however, tends to distort both the aims of the model and the purpose of the materials. Despite their ingenious design, Montessori materials are not intended to be used to assist teachers in conveying concepts to students. Rather, they are designed to enable learners to explore, experiment, and discover concepts. Not only are materials carefully sequenced, but they are also designed to be extended, combined, and revisited based on the guidance of Montessori-trained teachers. Without deep knowledge of both how and why the materials should be used, the results of experimenting with them more often than not produce confusion with none of the wide-scope benefits of the model. Examples of strategies to guard against include:

> **Montessori Light**
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> - Use of selected Montessori materials as "teaching aides" rather than learning tools.
> - Inserting "Montessori time" into otherwise conventional school schedules.
> - Attempting to import environmental features without adequate teacher preparation in creating structures needed to allow exploration and self-regulation to flourish.

Conclusion

When educators succeed in linking a developmental orientation with specific environmental attributes, Montessori-Inspired practice can benefit a variety of educational settings. By contrast, haphazardly selecting features of Montessori pedagogy or attempting to import elements in insolation from the wider aims and objectives of the model tends to degrade rather than enhance developmental practice.

Notes

[1] Sometimes referred to as "Ideal Learning," a consortium of personalized, developmental models has recently articulated a set of principles. To learn more about Ideal Learning and the Principles visit: www:trustforlearning.org.

[2] A demonstrable rise in public Montessori options is evident in the Montessori Census. Likewise, entrepreneurial ventures such as MontiKids (recently featured on ABC's *Shark Tank*) point to both greater name recognition and interest among a wide range of potential consumers (parents, policymakers, investors).

[3] Culclasure, B., Fleming, D.J., Riga, G., & Sprogis, A. (2018). An Evaluation of Montessori Education in South Carolina's Public Schools. Retrieve from the Riley Institute at Furman University: https://riley.furman.edu/sites/default/files/docs/MontessoriOverallResultsFINAL.pdf. Lillard, A. S., Heise, M. J., Richey, E. M., Tong, X., Hart, A., & Bray, P. M. (2017). Montessori Preschool Elevates and Equalizes Child Outcomes: A Longitudinal Study. *Frontiers in Psychology*, *8*(1783). doi:10.3389/fpsyg.2017.01783 Lillard, A. S., and Else-Quest, N. (2006). Evaluating Montessori education. *Science 313*, 1893–1894. doi:10.1126/science.1132362. Taggart, J., Heise, M. J., & Lillard, A. S. (2018). The real thing: preschoolers prefer actual activities to pretend ones. *Developmental Science*, *21*(3), e12582.

[4] Diamond, A., & Lee, K. (2011). Interventions shown to aid executive function development in children 4 to 12 years old. *Science, 333*, 959–964. Lillard, A.S. (2017). *Montessori: The science behind the genius* (3rd ed.). New York, NY: Oxford. Rathunde, K. (2014). Understanding optimal school experience: Contributions from Montessori education. *National Society for the Study of Education, 113*(1), 253-274. Lillard, A. S. (2012). Preschool children's development in classic Montessori, supplemented Montessori, and conventional programs. *Journal of School Psychology*, *50*(3), 379-401.

[5] NCMPS's direct work with public Montessori schools focuses principally on assisting communities in understanding the fidelity continuum, and making strategic decisions regarding a journey toward full implementation.

[6] See Cossentino & Brown, 2017 for more on the design of and research-base for the DERS.

[7] Elmore, R. F., Fiarman, S. E., & Teitel, L. (2009). *Instructional rounds in education: A network approach to improving teaching and learning.* Cambridge, MA: Harvard Education Press. Elmore, R. F. (1993). The role of local school districts in instructional improvement. In S. H. Furman (Ed.), *Designing coherent education policy: Improving the system* (pp. 96-124). San Francisco, CA: Jossey-Bass.