

A Logic Model for Montessori Education

Children Flourish in High-Quality Montessori Environments

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|---------------------|---|---|---|--|
| Key Concepts | Innate tendencies, critical periods, and stages drive development | Movement and cognition are intertwined | Learning progresses from concrete to abstract | Interest drives motivation and learning |
| Application | Pedagogy geared toward predispositions at each level | Hands-on materials matched to inner needs | Activities incrementally build procedural understanding | Lessons pique curiosity, and are optimally timed |

Overall Impact

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|--|
| Teachers who model kindness, restraint, humility, enthusiasm, consistency, appreciation, trust, patience, respect, and hope |
| Children who are physically healthy, mentally and psychologically fulfilled, spiritually nurtured and aware, and highly educated |

Inputs

| Critical Components | | Evaluation |
|---|---|---|
| Mixed-age grouping across a 3-year span | Larger classes / higher child-to-teacher ratios | Principal and teacher implementation surveys |
| 3-hour uninterrupted work periods | Montessori classroom design and pedagogy | Classroom observations |
| Full set of Montessori materials | Teacher observation and ongoing assessment | Environmental rating scales |
| Montessori credentialed teachers | Continuing professional development | Teacher and administrator surveys, focus groups, and interviews |
| Small group / one-on-one instruction | Diverse student population | Student surveys, focus groups, and interviews |
| Extensive student choice | | |

Programming Across Levels

| Resources | Actions | Goals |
|-------------------------------------|--|---------------------------------|
| Ordered environments | Choose activities of interest | Purposeful activity |
| Broad, interrelated curriculum | Use real-life and manipulative materials | Sustained focus |
| Individualized instruction | Assist and collaborate with peers | Self-discipline and knowledge |
| Positive emotional climate | Resolve disagreements | Compassion for others |
| Clear expectations | Express self artistically | Positive attitude toward school |
| Experiences with nature | Move freely in classroom | Confidence and initiative |
| Adaptation for atypical development | Help maintain the environment | Contributing member of society |

Expected Outcomes & Suggested Assessments

| Nonacademic | | Academic |
|--|--|---|
| Executive Function • BRIEF • HTKS • MEFS • NIH Flanker | Social Fluency and Emotional Flexibility • SSWH • SSIS • NIH TB-EB • ASQ-3 | Academic Performance • NIH TPVT • EDI • BCCS-3: R • MAP • PPVT-4 |
| Creativity / Self-Expression • EPoC • TTCT • Working Sample Portfolio Analysis | Self-Regulation • DESSA • NIH Cognition Battery | Cognition / General Development • NIH TB-CB • ASQ-3 • WJ IV |
| Motivation • ACT Engage • School-level behavioral data | | |

Infant / Toddler

birth through age 2½ to 3

| Resources | Actions | Goals |
|------------------------------------|-----------------------------|--|
| Nurturing, homelike setting | Engage in basic self-care | Emotional wellbeing |
| Consistent routines | Move and explore safely | Awareness of self and others |
| Healthy interactions | Make simple choices | Self-soothing |
| Precise language and communication | Reproduce motor patterns | Sense of belonging |
| Children treated with dignity | Contribute to the community | Independence in dressing and toileting |

Early Childhood

age 2½ to 3 through age 6

| Resources | Actions | Goals |
|-----------------------------------|---------------------------|--------------------------|
| One-on-one instruction | Repeat activity sequences | Independence |
| Precise presentations | Structure time | Responsible group member |
| Content grounded in reality | Complete work cycles | Factual knowledge |
| Friendly attitude toward mistakes | Explore the environment | Joy |
| Lessons on social etiquette | Self-correct | Self-regulation |
| | Prolonged activity | Love of work and order |

Elementary

age 6 through 9 & 9 through 12

| Resources | Actions | Goals |
|---|---------------------------------|-------------------------------|
| Interactive small-group lessons | Examine interdependencies | High productivity |
| Integrated curriculum | Conduct in-depth investigations | Interconnected knowledge |
| Storytelling and key presentations | Work toward abstraction | Intellectual curiosity |
| Increased freedom, greater responsibility | Build community | Social competence |
| Challenging activity | Explore beyond the classroom | Sense of justice and morality |
| | Plan and track activities | Global perspective |

Secondary

age 12 through 15 & 15 through 18

| Resources | Actions | Goals |
|--|--|--|
| Vigorous thematic learning | Personal expression | College and career readiness |
| Work of the head, hands, and heart | Civic engagement, service, and stewardship | Understanding of dignity of work |
| Strong classroom community | Field studies | Independent and interdependent citizen |
| Constructivist curriculum | Microenterprises | Engaged community contributor |
| Integration of divergent and convergent thinking | Reflective and contemplative study | Dedication to future humanity |

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Inputs† and Key Concepts, Applications, Overall Impact, and Programming Across Levels‡

(† and ‡ denote the sections supported by each reference)

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Suggested Assessments

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