



**TECHNOLOGY @ MSLF:
VISION, PLAN & GUIDELINES**

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INTRODUCTION

At the Montessori School of Lake Forest (MSLF), we support the introduction of technology concepts and skills to children at our school when they are developmentally ready. This introduction can include the use of technology in the upper levels of our program.

In support of our belief in Montessori educational philosophy, we aim to never replace real world, hands-on activities with high tech experiences. Our goal is to teach children how to be problem solvers, how to think outside of the box, and how to manage and express their emotions to prepare them for life and promote personal growth and healthy relationships.

MSLF MISSION & VALUES

MISSION STATEMENT

To develop the whole child, cultivate curiosity and a lifelong love of learning, and give each MSLF child a strong foundation for life.

VALUES

Excellence in Education	We achieve excellence in education by inspiring children to reach their full intellectual and social potential. To do this we attract, continually develop, and retain the most qualified Montessori classroom directors from both AMS (American Montessori Society) and AMI (Association Montessori Internationale).
Respect for the Child	We respect each child as an individual and are committed to guiding all students on their individual paths to independence and intellectual development. A calm, peaceful, and caring environment is created to provide an optimal learning experience for our students.
Development of the Whole Child	We develop the whole child promoting knowledge of self, challenging our students to become resourceful, empathetic, adaptable, and well prepared for life.
Appreciation of the Natural World	Our curriculum immerses students in structured and unstructured hands-on learning in the outdoor environment to promote curiosity, creativity, healthy living, and environmental stewardship.
Collaboration and Compassion	We create carefully balanced classrooms with diversity in age, background, and skill level to teach cooperation, mutual respect, and peaceful resolution practices.
Community Engagement	By creating a supportive, nurturing MSLF environment, we foster an engaged community of students, families, faculty, staff, alumni, and friends.

At MSLF, we are keenly aware of the need to educate our children on the use of technology as a tool. **Students are given the opportunity to use technology as a resource and tool only when developmentally appropriate.** We provide this summary to our community as a tool to communicate how technology is used at MSLF, as well as a resource so that decisions about technology use at home can be made to best support your child's development. We also remind all adults, whether at school or at home, to model purposeful, responsible technology use when caring for children at all stages of development.

MONTESSORI PLANES OF DEVELOPMENT

FIRST PLANE OF DEVELOPMENT

THE FIRST PLANE OF DEVELOPMENT: AGES 0-6



Period of great physical and biological independence

**Focus on developing:
Order | Concentration | Coordination | Independence**

TODDLER (AGES 0-3)

Children are absorbing information "unconsciously." They are watching, observing, intaking, and absorbing what they gather from their senses

*Period of construction
(learning)*

PRIMARY (AGES 3-6)

Children continue to absorb what they sense but in a conscious way, requiring more effort

*Period of consolidation
(applying)*

0-3 - TODDLER

During this stage of development, the child has a unique ability to absorb knowledge quickly and effortlessly. They learn through enriching hands-on experiences in the classroom that provide them concrete understanding of new concepts. Work is purposeful and meaningful, which engages a natural desire of the child during this stage to be actively engaged in their community (family/class).

3-6 - PRIMARY

During this stage, the main goals within the classroom are to develop concentration, self-control, independence, confidence, and an interest in learning about the world. The child still maintains the ability to absorb effortlessly, desires purposeful work and to actively contribute to their community. Social development is promoted in the mixed-age setting through natural situations which encourage students to become helpers and role models; encouraging the development of empathy, kindness and respect.

SECOND PLANE OF DEVELOPMENT

THE SECOND PLANE OF DEVELOPMENT: AGES 6-12



Social Development - Reasoning Mind - Intellectual Independence

- Explores with imagination and reason
- Explores the universe, across time and space
- Reasoning mind
- Interest in justice
- Works collaboratively
- Strong, resilient
- Gradual physical growth

LOWER ELEMENTARY (6-9)

Introduce imagination as a learning tool and encourage children to see themselves as a part of the greater community and world

*Period of construction
(learning)*

UPPER ELEMENTARY (9-12)

Help children get to know themselves as learners, so they can confidently take their first steps toward academic independence

*Period of consolidation
(applying)*

6-9 – LOWER ELEMENTARY

During this stage of development, the child begins to develop reasoning; they have a strong desire to know the reasons for things. They have a thirst for knowledge at this age. The use of imagination is utilized in developing knowledge by gaining their interest to further research topics in all subject areas. The second plane child is also experiencing a sensitive period for social justice and moral development. They are very interested in what is considered right and wrong. The classroom allows the child opportunities to experience social order and practice grace and courtesy through collaborative work.

9-12 – UPPER ELEMENTARY

During this stage of development students have an interest in the greater community as they begin to detach from their home environment and explore their role in society outside of their family. They move from concrete to abstract thinking, develop hypothetical thinking and seek to understand the motivation behind behavior.

THIRD PLANE OF DEVELOPMENT

THE THIRD PLANE OF DEVELOPMENT: AGES 12-18



The primary goal for the Montessori school at the third plane is to recognize the unrest the youth is feeling and to find ways to address the problems and concerns. Changes in behavior must be seen as normal passageways to maturity, not as problems. It is important to recognize that academic growth will only occur when the social and emotional needs of the adolescent are met.

ADOLESCENT PROGRAM

Naturally drawn to causes that involve high ideals; Prefer to take on projects that require action and they believe they can make a positive difference in the world

*Period of construction
(learning)*

HIGH SCHOOL

Tend to plan and carry out long-term group projects that not only explore the outside world, but put into practice all of the practical life skills acquired throughout their Montessori education

*Period of consolidation
(applying)*

12-14 – ADOLESCENT PROGRAM

During this stage of development adolescents experience significant cognitive, physical, emotional, social and moral growth. They develop their sense of identity and contemplate who they want to become. Significant intellectual development occurs at this time in the areas of metacognition (ability to think about one's thinking), hypothetical reasoning (ability to consider "what if") and abstract reasoning (ability to think about complex concepts).

TECHNOLOGY AT MSLF

FIRST PLANE OF DEVELOPMENT: AGE 0-6

THE ABSORBENT MIND

During the First Plane of Development, the focus for the child's development should be on hands-on, concrete, real experiences in the environment in order to fully develop focus, executive functioning, and functional independence.

Our Toddler and Primary classrooms at MSLF, which serve children aged 0-6, do not use technology for learning. Technology present in these environments are tools for adults in the classroom. Laptops, tablets, and smartphones may be present as tools for the teacher to take attendance each morning, take photos during the day, for recordkeeping, and for any urgent communication needed during the school day. As children move from the Toddler environment to the Primary environment, their knowledge and awareness of these tools increase, especially if they are also exposed to these tools being used at home by their caregivers in various ways. At school, we encourage Primary children to seek resources within our school instead of turning to technology to find answers to questions. Older Primary children are encouraged to visit other classrooms to borrow books to seek out answers or find a knowledgeable adult that can help with their inquiry.

MSLF strongly encourages limited use of technology by children at this age, as it hinders development of the holistic child and impacts the important development of executive function and focus. It is also important for adults to model purposeful, responsible technology use when caring for children at this stage of development.

SECOND PLANE OF DEVELOPMENT: AGE 6-12

THE REASONING MIND – CONSCIOUS IMAGINATION

As children move into the Second Plane of Development, their imagination begins to develop more rapidly and they move into more abstract thinking, building on the concrete concepts learned in early childhood. It is still important for children in this plane to continue to have real-world experiences, especially as their world begins to expand and they become more social.

LOWER ELEMENTARY – GRADES 1-3

Our Lower Elementary classroom at MSLF, which serves children in grades 1-3, does not use technology for learning. Technology present in these environments are typically tools for adults in the room. Laptops, tablets, and smartphones may be present as tools for the teacher to take attendance each morning, take photos during the day, for recordkeeping, and for any urgent communication needed during the school day. Occasionally, a child may work side-by-side with their teacher to look up

LOWER ELEMENTARY – GRADES 1-3 (CON'T)

information online that isn't available in another way as they pursue their research interests. However, children in Lower Elementary are not using any form of technology independently. The classroom may also use communication technology to stay connected to past students, at times scheduling video chats with former families. As children begin to expand their interests, they may also use technology with assistance from an adult to research information for planning a Going Out. They may also work side-by-side with their teacher as needed for online shopping for use of their classroom budget funds. Students may also have the opportunity to use a digital camera in the classroom, if relevant to their work.

UPPER ELEMENTARY – GRADES 4-6

Our Upper Elementary classroom at MSLF, which serves children in grades 4-6, uses technology minimally and purposefully, with the focus on technology as a tool for productivity, communication, and learning. Access to technology tools is also introduced gradually as children progress through their years in Upper Elementary, increasing the amount of freedom within limits provided in the classroom. For example, 4th year students will hand-write all papers, and when they are 6th years, they will be typing their papers on the computers. A detailed use of technology is provided at the beginning of the school year to all Upper Elementary families. Devices in this classroom are intentionally limited.

In addition, there is also technology present in these classrooms that are tools only for adults in the room. Laptops, tablets, and smartphones may be present as tools for the teacher or assistant to take attendance each morning, take photos during the day, for recordkeeping, and for any urgent communication needed during the school day.

We strongly remind families with elementary-aged children that modeling our own use of technology is just as important at this age as it is in early childhood. We recommend that parents carefully consider introduction of screen media thoughtfully and to monitor and limit a child's access to technology. The [American Academy of Pediatrics' Family Media Plan](#) tool allows parents to consider the purpose of media and to explore how it fits with each family's values. We also strongly encourage that families use resources such as [Common Sense Media](#) to select developmentally appropriate programming.

THIRD PLANE OF DEVELOPMENT: AGE 12-18

CONSTRUCTION OF SELF AS A MEMBER OF SOCIETY

Our Adolescent Program classroom at MSLF, which serves children in grades 7-8, continues use of technology purposefully, with the focus on refining the use for communication, research, and the Adolescent Program microeconomy. Hands-on experiences are still the most important at this age, but adolescents are searching for ways to do more, reach farther, and develop real-world skills using guidance from experts and/or technology. Students begin to learn more about proper formatting in all forms of writing, how to improve their formal writing, and more about professional communication. However, technology in the Adolescent Program continues to be available as a limited resource to encourage independent problem solving, in support of the Montessori belief that early adolescents develop their fullest potential by engaging in real life and being entrusted with authentic responsibilities.

During Creative Studio once a week, students are encouraged to explore any creative outlets they are interested in; this may continue to expand technology used for creativity such as video editing/movie making, music editing, graphic design, and more.

Technology tools used by adults only are present in the Adolescent Program classroom. Laptops, tablets, and smartphones may be present as tools for the teachers to take attendance each morning, take photos during the day, for recordkeeping, and for any urgent communication needed during the school day.

We continue to recommend that parents of adolescent students model appropriate use of technology, as exposure to different forms, including social media, continues to grow at this age. At home, we recommend that parents monitor their child's access to technology and encourage appropriate use of technology. The [American Academy of Pediatrics' Family Media Plan](#) tool allows parents to consider the purpose of media and to explore how it fits with each family's values. We also strongly encourage that families use resources such as [Common Sense Media](#) to select developmentally appropriate programming.

TECHNOLOGY USE SUMMARY

TECHNOLOGY TYPE	TOOL/ DEVICE	TODDLER (0-3)	PRIMARY (3-6)	LOWER EL (GR 1-3)	UPPER EL (GR 4-6)	ADOLESCENT (GR 7-8)
DAILY ATTENDANCE	Teacher laptop or tablet	✓	✓	✓	✓	✓
PHOTOS	Digital camera, tablet or smartphone	✓	✓	✓	✓	✓
COMMUNICATION	Teacher laptop or smartphone	✓	✓	✓	✓	✓
LESSON TRACKING	Teacher laptop or tablet	✓	✓	✓	✓	✓
TYPING PRACTICE	Classroom desktop or laptop				✓	
CODING	Classroom desktop or laptop				✓	
DESIGN SOFTWARE	Classroom desktop or laptop				✓	✓
DOCUMENT CREATION	Classroom desktop or laptop				✓ <i>with teacher assistance</i>	✓
ONLINE RESEARCH	Classroom desktop or laptop			✓ <i>done by teacher</i>	✓ <i>6th years</i>	✓

TECHNOLOGY PRESENT IN CLASSROOMS

TECHNOLOGY TYPE	TODDLER (0-3)	PRIMARY (3-6)	LOWER EL (GR 1-3)	UPPER EL (GR 4-6)	ADOLESCENT (GR 7-8)
TEACHER LAPTOP	✓	✓	✓	✓	✓
TABLET	✓	✓	✓	✓	✓
SMARTPHONE <i>(personal staff devices only)</i>	✓	✓	✓	✓	✓
STUDENT DESKTOP				✓	✓
STUDENT LAPTOP				✓ <i>(6th years only)</i>	✓
STUDENT TABLET				✓	✓

DETAILS FOR CLASSROOM TECHNOLOGY USED DIRECTLY BY STUDENTS

	UPPER ELEMENTARY GRADES 4-6	ADOLESCENT PROGRAM GRADES 7-8
DEVICES IN CLASSROOM	<ul style="list-style-type: none"> Two desktop computers - available for any student Three laptop computers – 6th grade students only Student iPad – shared device, used with permission only for taking photos/video, movies, animation, checking weather, online dictionary, and ukulele tuner One iPad used in classroom for alarms to keep on schedule 	<ul style="list-style-type: none"> Desktop Laptop iPad Graphing calculators - learning what appropriate calculator, used as a tool to do <i>more</i> math, not a way to get out of doing math <i>Future addition: 3D Printer with design software</i>
USAGE LIMITS	<ul style="list-style-type: none"> For typing, research, design, and coding: limited 15-20 minutes twice a week 	<ul style="list-style-type: none"> No specific time limits All devices are shared Limited number of devices encourages efficient use so can be used by classmates
STUDENT ACCOUNTS	<ul style="list-style-type: none"> Student account on Google Classroom (non-email accounts) 	<ul style="list-style-type: none"> Shared student account in Microsoft 365 <ul style="list-style-type: none"> Shared student account to create visibility and accountability. Allows for access from any classroom computer or from home

	UPPER ELEMENTARY GRADES 4-6	ADOLESCENT PROGRAM GRADES 7-8
SOFTWARE ACCESS	<ul style="list-style-type: none"> • Google Docs – teacher opens documents and shares it to their account so they can type up papers (6th grade) • Canva – online design software (5th and 6th grade) • Code.org • Typing Club • Weather app • Photos/Camera app • Tuning app (for ukulele) 	<ul style="list-style-type: none"> • Microsoft Office Suite - Word, Excel, PowerPoint, Outlook, OneDrive <ul style="list-style-type: none"> ○ Lessons about organization ○ Used for typing assignments • Canva • Cook Memorial Library (book catalog and online databases) • <i>Math software?</i> • <i>Research? Online databases? - to find high quality, trustworthy resources for research</i> • <i>Research for projects or recipes?</i> • Amazon.com – for classroom and microeconomy purchases • Square – for microeconomy point of purchase • Square online store – for microeconomy pre-orders • Photos/Camera app • Video editing • Graphing software – Geogebra, Desmos • Duolingo – for exploring languages
KEY SKILLS LEARNED/ GOALS FOR LEARNING	<ul style="list-style-type: none"> • Introduce typing and begin to improve speed and accuracy 	<ul style="list-style-type: none"> • MLA formatting for papers and bibliographies • Improving typing speed and accuracy • Grace, courtesy, and professionalism in email communication

TECHNOLOGY RESOURCES FOR PARENTS

FROM AMERICAN ACADEMY OF PEDIATRICS

American Academy of Pediatrics: Media resources for families	https://www.healthychildren.org/english/family-life/media/pages/default.aspx
American Academy of Pediatrics: Family Media Plan	https://www.healthychildren.org/English/fmp/Pages/MediaPlan.aspx
Media and Young Minds from American Academy of Pediatrics	https://publications.aap.org/pediatrics/article/138/5/e20162591/60503/Media-and-Young-Minds
Kids & Screen Time: How to Use the 5 C's of Media Guidance from American Academy of Pediatrics	https://www.healthychildren.org/English/family-life/Media/Pages/kids-and-screen-time-how-to-use-the-5-cs-of-media-guidance.aspx
Building Healthy Relationships with Media: Essential Skills for Children 10 and Younger from the Center of Excellence on Social Media and Youth Mental Health	https://www.aap.org/en/patient-care/media-and-children/center-of-excellence-on-social-media-and-youth-mental-health/building-healthy-relationships-with-media-essential-skills-for-children-10-and-younger/
The AAP Parenting Website: Talking With Teens About Media: Conversation Starters	https://www.healthychildren.org/English/family-life/Media/Pages/talking-with-teens-about-media-conversation-starters.aspx
Conversation Starters for Families About Media from the Center of Excellence on Social Media and Youth Mental Health	https://www.aap.org/en/patient-care/media-and-children/center-of-excellence-on-social-media-and-youth-mental-health/conversation-starters-for-families-about-media/
Media Use in School-Aged Children and Adolescents from American Academy of Pediatrics	https://publications.aap.org/pediatrics/article/138/5/e20162592/60321/Media-Use-in-School-Aged-Children-and-Adolescents

OTHER RESOURCES

Children's Screen Time Action Network	https://screentimenetwork.org/
Center for Humane Technology	https://www.humanetech.com/families-educators
Common Sense Media: Movie & TV reviews for parents	https://www.commonsensemedia.org/
Wait Until 8th: Community of parents dedicated to helping families have a healthy relationship with technology	https://www.waituntil8th.org/