Technology Plan
2023-24

STERLING MONTESSORI
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Introduction

Where does technology fit in a Montessori curriculum? Dr. Maria Montessori, notes that an education should involve "...the preparation of young people to understand the times in which they live." This intuitive proclamation encompasses the realization that future generations of children will experience the world differently than those before them.

This technology plan outlines the vision for the integration of technology into the curriculum at a K-8 Montessori school.

Acronyms for Reference	
Sterling Montessori Academy & Charter School	
Children's House (PreK3-K)	CH
Lower Elementary (Gr 1-3)	LE
Upper Elementary (Gr 4-6)	UE
Middle School (Gr 7-8)	MS

Principles and Mission

Principles for Technology

The plan is based on the following principles:

- Technology is a tool, not a central element to the Montessori curriculum. Technology should be used to supplement and enrich learning, not to replace traditional, Montessori methods.

- Technology should be integrated into the curriculum in a way that is developmentally appropriate for students. Younger students should have limited access to technology, while older students should have more opportunities to use it for independent learning and research.

- Technology should be used to promote collaboration and communication among students and teachers. Technology can be a powerful tool for facilitating learning within the classroom environment and encouraging students to share their work with others to gain positive feedback from peers as well as instructors.

Our Mission

Our mission is to:

- Provide grade levels 1 through 8 with access to technology tools.

- Integrate technology into the Montessori curriculum in a way that is meaningful and engaging for students.

- Promote the use of technology to support collaboration and communication among students and teachers.

Deployment of Staff Technology

Instructional Staff Technology

Each instructor is assigned a laptop that is to be used for all work-related activities. Each classroom has an iPad for all photos, as well as availability for any EC case requirements. Each of the 4 MS classrooms have two iPads for all photos, as well as availability for any EC case requirements. Printing is available for all instructors to produce written documentation used by students to achieve curriculum objectives. Printing is done wirelessly and securely.

Operational and Administrative Staff Technology

Operational and administrative staff are provided with the appropriate resources to effectively and efficiently accomplish their assigned responsibilities. These include, but are not limited to, applications to improve workflow, specialized devices for those with specific OS requirements, and hardware accessories to help provide a seamless experience. While secure wireless printing is also available for all operational and administrative staff, secured local printers are provided on an as needed basis for sensitive document printing and scanning.

Internet Safety and IT Security

Standards

Sterling sets the following IT security standards to mitigate data loss and protect our staff and students:

- In order to reduce our attack surface, Sterling utilizes a variety of industry-recognized tools, providing multiple layers of reinforcement. Information is secured at 4 major levels: User, Device, Network, and Cloud.
- All data, local and cloud based, is encrypted and backed up 3 times per day. Backups are stored offsite using a SaaS-based backup service. Backups are held indefinitely, protecting against malicious and accidental human intervention.
- Hardware-based multi-factor authentication tokens further ensuring the safety of all access-control and data protection. Applications that don't support hardware-based authentication tokens are required to use TOTP authentication. Applications that don't support either of these 2 methods are not allowed to be used for any sensitive information, and are further reviewed to determine if they are eligible for continued use in Sterling's software stack.
- All staff are required to participate in Sterling security awareness training platform. Staff are continually trained on current online dangers and threats. This is accomplished in the form of a required annual training certification, and periodic video refreshers.

Continual Improvements

- As the cyber-security space evolves at a rapid pace, we are actively investigating our current policies, procedures, and security stack to mitigate risk. We are making improvements in a thoughtful and prompt manner, while also taking time to educate our staff and students about current online dangers and threats.

- Provide a safe and secure environment for online learning and curriculum development

Deployment of Student Technology

Lower Elementary
Each of the 8 LE classrooms are assigned a locking computer cabinet to allow a 1:5 ratio of devices on-hand for use at the instructor's discretion. All LE chromebooks are within 4 years of age, and receive regular updates.

Upper Elementary
Each of the 7 UE classrooms are assigned a locking computer cart to allow a 1:2 ratio of devices on-hand for use at the instructor's discretion. All UE chromebooks are within 3 years of age, and receive regular updates.

Middle School
Each of the 4 MS classrooms are assigned a locking computer cart to allow a 1:1 ratio of devices on-hand for use at the instructor's discretion. All MS chromebooks are within 2 years of age, and receive regular updates.

Specials
Spanish has a 1:1 ratio of iPads for in-class learning using self-paced software. All other specials are provided technology to meet planned curriculum activities.

Exceptional Children
Each EC teacher is allotted the appropriate technology (including hardware and software) based on their students' case requirements.