



ST. MONICA SCHOOL

ELEMENTARY 1:1 IMPLEMENTATION PLAN 2014-2020

Overview

St. Monica School Tech Plan identifies five goal areas for implementation between 2017 and 2020:

1. Provide ongoing, embedded and differentiated professional development to increase use of technology as a tool to transform instruction.
2. Identify and articulate workflow enhancements to support technology integration and efficiency.
3. Monitor and evaluate the effectiveness of instructional software and tools to support instruction and interventions for use with students.
4. Establish an educationally responsive device replacement cycle for faculty and classroom devices utilizing updated parameters.
5. Implement a developmentally responsive 1:1 device program to provide access to technology to all students, K-8 grades.

Members of the teaching learning and Tech Committee

Broad participation has been sought throughout the visioning and planning phases of this project to ensure varied perspectives, input and insights. Multiple modalities were also used to engage and inform our stakeholders: Committee meetings, Community and Teacher forums, parent meetings, surveys, newsletter articles, website pages, and social media postings.

As the plan is implemented over the next three years, we will continue to share information in a transparent way and seek ongoing feedback from our community of students, parents, and faculty about the impact and needs of the 1:1 implementation. We are fortunate to have a collaborative and shared vision for enhancing the use of instructional technology and believe that fostering ongoing dialogue will ensure responsive and responsible plan implementation.

The following groups and individuals have been instrumental in the development of this plan:

Anca Wilson, Pat Porter, Kristin Pomada, Erin Battersby, Mason Helms, Dale Nelson, Jamie North, Greg Mahoney, Terry Callahan

Vision and Purpose of 1:1

Critical Questions:

- What is the vision of the St. Monica School Technology Plan?
- Why do we believe that 1:1 is the appropriate step to take to move instruction forward?

Vision:

In the 21st Century, the role and purpose of technology has dramatically shifted toward a fully integrated and seamless presence. Technology devices have become essential tools for teachers, just as they have for other professionals and in the business world. For our students, they have become the equalizer that provides access to information, the ability to collaborate, create, and connect with people throughout the world, and the opportunity for differentiation and personalization of education.

St. Monica School's Tech Plan articulates the following vision for technology Implementation:

To increase and enhance the use of technology as a tool to improve engagement, elevate rigor, and transform instructional practices in the classroom and at home.

Specific to 1:1 device implementation, the following timeline has been articulated:

- In 2014-15, 1:1 for grade 6 students was launch with student purchased devices used at school and home on a daily basis.
- In 2015-16, 1:1 for grade 6 & 7 students continued with student purchased devices used at school and home on a daily basis.
- In 2016-17, 1:1 for grade 6 & 7 & 8 students continued with student purchased devices used at school and home on a daily basis.
- Full Middle School 1:1 implemented, held a Parent Meeting to access the program
- Parent and Student Surveys conducted for feedback on pros and cons
- In 2017 Tech Committee recommends expanding program to elementary
- In 2017-18, grade 2-5 students will carry devices between classes, and typically store devices at school, with optional use at home in 4-5 with parental permission.
- Tentative: In 2017-18, grade K-1 classrooms will have half sets of devices maintained in each instructional space for student access and use throughout the day. Teachers may share access to carts of devices with availability to bring into the classroom for small or whole group instruction as appropriate.

Further rationale for device selection is shared in the "Sustainable Financing" section, but our 1:1 Implementation Plan identifies the BAK Atlas as the tool for use in St. Monica Elementary and Surface Pro 4 for Middle School.

The BAK Atlas allows for a personalized learning experience, with educational apps and books geared to any level or subject. Teachers and students can develop interactive materials with One Note and Office 365. We believe this device empowers our teachers and students to engage in the creation of content with maximum flexibility for future growth.

Purpose:

Before describing “what” our technology plan includes, we believe it is important to articulate “WHY” we believe technology integration is an essential component of 21st Century

Education:

1. To transform what the classroom is and what we can DO in the classroom.
2. To use technology as a TOOL to improve and enhance teaching and learning.
3. To prepare students for THEIR future, not ours.
4. To empower students take ownership of their learning.
5. To engage students in creating content, collaboration with others, and making connections.
6. To remove constraints of traditional classroom and schools - time, location, audience.
7. To provide meaningful and authentic learning experiences for students and teachers.
8. To facilitate home/school communication and connections

Building the Digital Environment

Critical Questions:

- What is the current status of device allocation and network infrastructure?
- What physical plant or environmental issues may impact the implementation of the 1:1 plan?
- How will devices be managed?
- What is the procedure for registering and distributing the devices?

In order for our 1:1 implementation plan to reach its full potential, we must also plan for and address infrastructure and “back-end” issues. These broad Digital Environment issues create the space in which the Teaching and Learning enhancements can grow and are critical to the success of the plan.

Infrastructure:

This area has been reviewed and addressed over the past two years. Our school has invested in the infrastructure to provide appropriate bandwidth and access points throughout the school. Our previous Technology plan goals have been met and provide a solid foundation of current device allocations upon which we can build for the future:

As of 2017	Faculty Devices	Student Devices	Lab Devices	Access Points	Servers
	27	124	28	20	1

Current device allocation description:

All certified faculty have a laptop, ages ranging from 2014-17 purchase; an Interactive White Board and compatible software, 2017 purchase. These are in alignment with the prior technology plan ratio.

Additionally, other devices may be available to support instruction. Desktop and laptop computers have been provided in the form of library labs and mobile carts of laptops. These are devices intended for student use, but have limited access. Use of this technology is dependent upon teacher direction and availability.

Current device allocations vary by classroom based upon space, student needs, and teacher/administrative preference. It is our goal to make device availability more uniform and standardized across the school. Technology has become, and will increasingly become, a standard tool for instructional use. In this spirit, our planning and conceptualization of technology must also shift to meet this changing role.

Physical Plant:

All current physical plant needs are being met at this time. Additional devices will increase draw on electrical supply. Storage and charging carts will be equipped with a two tier alternate level charging unit to minimize impact on voltage draw. Circuit load may also be impacted with increased devices. This is an area that will require monitoring of impact.

Managing Devices:

Training and software will be purchased from Microsoft as a component of our initial roll-out, and an annual \$150 tech fee will be paid per student in September. Our Technology Specialist will be responsible for coordinating all device enrollment and management activities.

Device Registration and Distribution:

Procedures for registration and distribution of BAK Atlas and Surface Pros will be developed to meet the needs of students and families and ensure that the devices will be properly initialized and prepared for use. These procedures will include: Registration, Office 365 ID creation, Acceptable Use parameters, Accidental Protection plan, Security, and Responsible use.

Teaching and Learning

Critical Questions:

- How will we frame the changes in teaching and learning?
- What best practices in pedagogy will be used to move teaching and learning forward?
- What are the expected outcomes for implementing 1:1?

The heart of the 1:1 Implementation Plan is Teaching and Learning: the ways that technology can be used as a tool to improve and enhance our instruction. Some shifts will be subtle while others, perhaps more overt. St. Monica School has a long record of strong student performance and growth. This plan is

intended to bridge that outstanding performance into the 21st century by updating the tools and methodology used to engage our students, elevate rigor and transform our instruction.

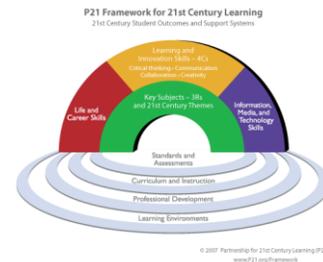
Framework:

As educators focus on Teaching and Learning, we must begin this investigation with two questions:

- What are the skills of the 21st Century?
- How can we use technology as a tool to help us transform Teaching and Learning?

The Partnership for 21st Century Skills, a consortium of educators and business professionals, has developed a framework or vision to answer these questions. This framework is widely utilized by school districts to guide their transformation. The following link provides more information about the P21 framework: <http://www.p21.org/our-work/p21-framework>

- Critical Thinking and Problem-Solving • Innovation and Creativity
- Inquiry • Communication • Collaboration
- Information and Media Literacy • Technology Skills
- Self-Directed Learning • Global Awareness



The 3 Rs of education - Reading, writin', and 'rithmetic - are still fundamental skills and basic elements in our curriculum. But they take on a new shape when viewed through a 21st century lens.

Education has always evolved and grown over time to reflect new information, pedagogy and tools. Framing our instructional transformation around the P21 skills provides themes for professional development and pedagogical shifts. In the 21st Century we need students to use the “3 Rs” to

- | | |
|------------------------|------------------------|
| • Think Critically | • Embrace Culture |
| • Communicate Clearly | • Develop Creativity |
| • Work Collaboratively | • Utilize Connectivity |

Best Practices:

Our instructional practices continue to be soundly based in current research. Ongoing professional development in the following areas will align our practices to best engage students and elevate rigor:

- Inquiry Based Instruction
- Project and Problem Based Learning
- Authentic Audience
- Real-Life Applications
- Collaborative Learning
- Increased Choice and student ownership
- Differentiated Instruction and personalized learning
- Formative and Summative assessment



These best practices are reflected in School Improvement Goals and professional reflection guided by building administration.

Expected Outcomes:

Articulating specific and quantifiable outcomes is quite difficult in the educational setting given the interconnectedness of the myriad of factors that contribute to student growth and development. Current research on 1:1 device implementation plans suggests that the following positive results are likely to be expected:

- To improve the quality of teaching and learning
- To improve equity of access to technology
- To enhance formative assessment
- To enhance differentiation of instruction
- To improve students' ability to become self-directed learners
- To prepare students for the world of work and THEIR future

The following educational success measures have been documented as improvements following a 1:1 implementation: decreased disciplinary action rate, improved high-stakes test scores, reduced paper copying expenses, improved student and teacher attendance, reduced dropout rate, increased student engagement, collaboration, and communication.

We will continue to closely monitor student growth and performance, as well as identify instructional strengths and needs in our curriculum planning cycle.

Professional Development

Critical Questions:

- Is professional development based on a culture of learning, risk-taking, and learning from mistakes?
- Are professional development goals explicit?
- Is there appropriate follow-up, coaching, and support?
- How will we measure teacher growth?

In schools where 1:1 implementation plans have failed, professional development is often the key missing factor. As we developed this plan, we have been keenly aware that supporting our teachers and administrators as they learn new skills, approaches, and techniques is a fundamental element to the success of this plan. We believe that professional development needs to be embedded and ongoing to provide "on-demand" coaching and resources. This will require thorough planning and differentiation of our professional development offerings as well as the development and use of new tools and strategies.

Culture of Learning and Risk-Taking:

Implementing a 1:1 plan will require stepping out of our comfort zones and into new and innovative places. We must foster a culture of collaborative learning and sustained support. Through our professional development we need to encourage "risk-taking" so that our faculty feel comfortable exploring and implementing new ways of learning through the use of devices. We need to guide this process of problem identification, solution selection, trial and reflection to support professional learning.

Explicit Professional Development Goals:

To enhance our professional learning, we all need to be clear and explicit in articulating professional development goals based on our differentiated needs. Using the current evaluation process and goal setting format, administrators and teachers will set personal technology goals, using the Technology Specialist for technical assistance and as resources for support.

Appropriate Coaching, Follow-up and Support:

St. Monica School has a Technology Specialist, to support the staff through personalized professional development.

Through appropriate needs assessment surveys the Technology Specialist will evaluate each school's professional development needs and implement accordingly. Long-term support for this position is critical to the embedded and ongoing professional development needs of this plan.

Measuring Teacher Growth:

The SAMR model articulates the steps in transforming instruction. Using a survey tool, pre and post implementation data will be collected to measure teacher growth. Within the span of the current Tech Plan, it is our target to help ALL teachers increase their comfort with and application of technology integration so that they teach "above the line". Professional development offerings will be directed at differentiated levels of SAMR integration to target and support teachers and administrators along this path of transformation. It is our intention to "SAMRize" St. Monica over the next four years!

The Device

Critical Question:

- Which device are we recommending?

As part of our 1:1 implementation plan we needed to select the right device for our school. Through this selection process we took into consideration our current student and staff population, implementation challenges, software availability before making the hardware decision. Upon completion of this process we are recommending the BAK Atlas as the Elementary 1:1 device for the school.

Device Specs

OS- Windows 10 Pro

Processor

Quad Core Intel® Atom™ Processor Z8350
1.44GHz Base/1.92GHz Burst Frequency

RAM- 4GB (LPDDR3L)

Storage

128GB eMMC, Mirco SD Card Slot up to 64GB

Display

11.6" (16:9, 1366 x 768HD)

Battery

8hrs Lithium Polymer, Lithium Polymer 34.65W

Camera

180° Rotatable 2MP Camera

The BAK Atlas provides:

- Most immediate instructional benefit due to our familiarity with the device and platform.
- Enhanced ability for creation of content
- Greatest access to applications, tools, and professional development support through Microsoft.
- Comfortable price point for current and long range budgeting

Policies and Procedures

Critical Questions:

- What is the process for revising or modifying policies and procedures?
- What policies and procedures do we need to put in place with this initiative?

Policy is established by St. Monica Tech Committee which includes input from parents with legal and tech experience, plus administration and staff representatives. These policies provide the legal framework for decision and actions related to students, staff, and programming. Procedures are developed to articulate the process of enacting the policy and provide guidance for correct steps to take to ensure compliance. While our policies and procedures are already well established, implementing a 1:1 plan will require a review of these areas to provide direction and guidance for new questions and decisions.

Review Process:

The Tech Committee will review current policy and provide recommendations for new procedures for approval by the principal. This standing committee will review key decisions and work with the Principal and School Commission to update policy, administrative procedures, and handbooks as necessary.

Key Policy and Procedure issues:

Prior to a 1:1 deployment it is critical to evaluate current policies and procedures to verify that we meet the requirements. Both short-term (immediate) and long-term (planning) issues need to be reviewed. Key items for immediate attention include: the Acceptable Use Policy (AUP), filtering requirements, Social Media, use of student email, safety and security measures.

Procedures for safe and appropriate care of devices, insurance claims for damaged or lost devices, expected safeguards for use at home, access to unfiltered materials and other items need to be developed prior to the 1:1 deployment at St. Monica School.

Engaging the Community

Critical Questions:

- What are the goals and expectations for use of technology at home?
- What support is needed for parents to assist their children at home?
- What parent or community issues need to be addressed to support full implementation of the 1:1 plan?

While the 1:1 implementation plan will obviously have significant and direct impact on the students' experience at school, it will also require a partnership with our parents and community members.

Representatives from our Parent Club, School Commission, parents and community members have been involved in the visioning and planning for this 1:1 plan and will certainly continue to play an important role during the implementation and use phases of the plan.

Goals and Expectations:

Educating our students has always been a shared responsibility between home and school. This critical partnership is a fundamental component of a student's growth and development. As we transform instruction in the classroom, we will need parents to continue to support and nurture learning at home.

When students take their 1:1 device home, we will need parents to monitor and support student use. When students work on devices at school, they may need increased access to online resources and tools at home. In ALL cases, parents need to understand the shifts in our instructional approaches, be informed about curricular tools and programs, and engage in open communication with teachers and administration.

Goals for our continued partnership include:

- To model, teach, and monitor safe and appropriate use of devices at home.
- To inform school personnel of issues with, concerns about, and/or damage to devices.
- Timely and responsible payment of fees and completion of paperwork.
- To provide ongoing transparency to and training for parents related to curricular and instructional changes at St. Monica School.

Home Support:

Our parents, just like our students and staff, have varied needs for support. In order for our students to maximize their learning using these devices, we will need the continued support of their parents. Through conversations with parent representatives, we have identified key areas that we will offer as ongoing areas of training to assist parents:

- Orientation: Device set-up, introduction, and basic features
- Policies and procedures: Acceptable Use, Insurance, and Parent/Student Handbook
- IT Troubleshooting: I can't get this stupid thing to work!
- Safety and Security: Content filtering, internet safety, and monitoring use
- Curriculum resources: Overview of school approved online materials
- Instructional Shifts: How to help my 21st Century Student?

We will also offer a wide range of methods for parents to access this support. While some face to face will be required, we will provide online resources and recorded webinars for on-demand support.

Parent and Community Issues:

There are sure to be many issues that arise as we implement the 1:1 plan that will need to be addressed. We will continue to support our families by providing continuous communication as we work through this issues.