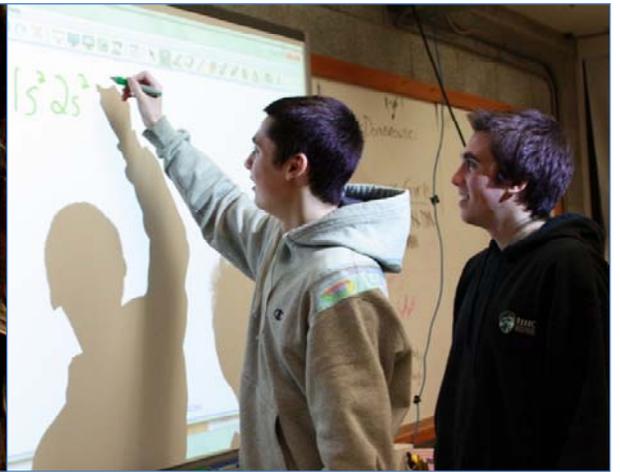


T E C H N O L O G Y



Nauset Public School District Technology Plan 2014 - 2019

Mission: The Nauset Public Schools will develop, maintain, and continuously provide the infrastructure and the professional support necessary to ensure that all students have the opportunity to develop and make use of current technology as both a producer and a consumer.

TECHNOLOGY SUB-COMMITTEE MEMBERS:

- Cheryl Codair.....Region School Committee Member and Co-Chair
- Sarah Blackwell.....Region School Committee Member and Co-Chair
- Jayne Fowler.....Region School Committee Member
- Barbara Lavoine.....Nauset Public Schools Technology Director
- Keith Gauley.....Assistant Superintendent and Co-Chair
- Kathleen Tringale.....Nauset Regional High School Teacher
- Thomas Faris.....Nauset Regional High School Teacher
- Majen Hammond.....Nauset Regional Middle School Teacher
- Brandy Jackson.....Nauset Regional Middle School Teacher

- Contributing Members:
- Dr. Richard Hoffmann.....Superintendent
- Thomas Conrad.....Nauset Regional High School Principal
- Dr. Maxine Minkoff.....Nauset Regional Middle School Principal
- Eduardo MacDonald.....Nauset Regional High School Asst. Principal
- Dr. Paul Markovich.....Nauset Regional High School Asst. Principal
- Teresa Martin.....Consultant
- Others.....Nauset Public Schools’ Graduates, Current Students, Staff Members, Parents, and Community Members

The creation of this Technology Plan began with the formation of a Region Technology Sub-Committee in the spring of 2013. Following a review of the current District Technology Plan and technology plans from other school districts, the Sub-Committee began to identify benchmarks, goals, and a vision for technology use. The process included the opportunity for input from staff at the High School, Middle School, and elementary schools across the District, presentations by Cheryl Codair and Teresa Martin, conversations with Nauset graduates, discussion and feedback from students in grades 9-12 at Nauset Regional High School and with students in grades 6-8 at Nauset Regional Middle School, and suggestions included in a report from *Atrion* following an assessment of the current infrastructure and systems. A Citizen’s Forum was held in October 2013 as a ‘visioning’ event and this provided the opportunity for input and ideas from community members across the district, including staff, parents, additional students, and community members beyond those with children in the Nauset Schools. SMART goals were established for each of the Benchmarks within the Technology Plan and our mission became clear. We thank all of those involved in the process, the debate, and the creation of this plan. We believe that the Nauset Public Schools has the opportunity to provide the necessary technology infrastructure, professional development, support, staffing, and curriculum content/skills to meet the needs of our students in the 21st Century with the implementation of this plan.

CONTENTS

<u>BENCHMARK 1 – COMMITMENT TO A CLEAR VISION AND IMPLEMENTATION STRATEGIES</u>	4
Educational Technology – IMPLEMENTATION STRATEGIES	4
Budgetary Requirements and 5-year implementation schedule (appendix C)	Error! Bookmark not defined.
<u>BENCHMARK – TECHNOLOGY INTEGRATION AND LITERACY</u>	5
The Nauset Classroom	Error! Bookmark not defined.
SMART GOALS – Benchmark 2	5
Budgetary Requirements and 5-year implementation schedule (appendix C)	Error! Bookmark not defined.
<u>BENCHMARK 3 – TECHNOLOGY PROFESSIONAL DEVELOPMENT</u>	6
SMART GOALS – Benchmark 3	6
Budgetary Requirements and 5-year implementation schedule (appendix C)	Error! Bookmark not defined.
SMART GOALS – Benchmark 4	7
Budgetary Requirements and 5-year implementation schedule (appendix C)	Error! Bookmark not defined.
<u>PROFESSIONAL DEVELOPMENT PLAN</u>	8
Year 1: Professional development will include the following:	8
Year 2: Professional development:	8
Year 3: Professional development:	9
Year 4: Professional development:	9
Year 5: Professional development:	10
Additional Technology Workshops offered during non-school hours may include:	10
<u>APPENDIX A – K-12 IMPACT OF TECHNOLOGY PLAN</u>	11
<u>APPENDIX B – TECHNOLOGY LITERACY BENCHMARKS AND EXPECTED OUTCOMES</u>	13
<u>APPENDIX C – 5-YEAR IMPLEMENTATION PLAN</u>	16

Mission – *Nauset Public Schools will develop, maintain, and continuously provide the infrastructure and the professional support necessary to ensure that all students have the opportunity to develop and make use of current technology as both a producer and a consumer.*

Vision - Nauset Public Schools will use technology to enhance and improve student learning, develop critical thinking skills, and foster creativity, providing all learners access to knowledge, information, and resources that connect them to the local and global community. Students and staff will be technologically literate and remain current with tools necessary to effectively communicate, collaborate, research, and access resources. They will apply their understanding, present ideas, evaluate and analyze information, and share knowledge in a socially responsible and ethical manner. Educators will utilize technology to collaborate on curriculum, differentiate instruction, analyze assessment data, and provide learning opportunities and interventions to maximize student growth and achievement. The District will identify and implement the appropriate resources to increase the efficiency and effectiveness of our management and operations systems.

EDUCATIONAL TECHNOLOGY – IMPLEMENTATION STRATEGIES

Nauset Public Schools is committed to achieving our mission and vision for technology. As part of our vision, the following strategies are suggested to meet the benchmarks, goals, and implementation schedule outlined within this plan:

- Provide students with the necessary opportunities and instruction to develop the skills and aptitude required to make effective use of available technologies in order to succeed in our schools, in college, in the work place, and as a tool for personal growth and development
- Develop and provide effective technology training and support for all Nauset Public School staff
- Create a safe online learning environment for activities on both the local-area and wide-area networks
- Provide all academic classrooms with current and effective technology equipment.
- Employ the robust use of internet and cloud-based applications
- Assess technology tools and services in regard to impact on teaching, learning, and data management
- Ensure that the financial resources are committed to meeting the technology needs related to infrastructure, hardware, software, professional development, and staffing
- Coordinate and evaluate technology purchases and implementation through the IT department and monitor goals annually with involvement of technology stakeholders
- Provide collaborative opportunities for staff and students to share ideas, information, analyses, and creations

BENCHMARK 2 – TECHNOLOGY INTEGRATION AND LITERACY

Nauset Public School District students and staff will have the necessary technology literacy skills to function in a global community. A culture of digital literacy will be established and fostered through daily interactions among students and staff. The District will encourage innovative strategies and opportunities for virtual learning and online instructional courses.

Students will meet annual grade level technology benchmarks as established within the District. Staff and students will collaborate to create learning opportunities that embed these skills and aptitudes, and student work will be assessed with consideration of both standards from the Massachusetts Curriculum Framework for each content area and the Technology Literacy Standards. Student work will include integration of standards into class work, presentations, publications, and projects.

Nauset staff members will continue to gain and maintain proficiency with the embedded use of technology; when appropriate teachers will integrate technology as a curriculum, instruction, and assessment tool. The embedded use of technology will further enhance student interest, inquiry, problem-solving, analysis, collaboration, creativity, and critical thinking skills.

The Nauset Public School District understands that Technology Integration and Literacy cannot be achieved without appropriate staffing. The District will provide Instructional Technology Specialists to support, coach, and model technology instruction and integration.

SMART GOALS – BENCHMARK 2

- Nauset staff will utilize a 1 student: 1 technology device environment to enhance curriculum, instruction, and assessment practices beginning in September 2014
- By the Fall of 2014, technology courses will be included as part of the Program of Studies for students in grades 6-12 and these courses will be taught by qualified teachers
- Beginning in the 2014-15 school year and each year thereafter, students will meet annual technology literacy standards as defined by the District's benchmarks for each grade level K-12
- Beginning at Nauset Regional High School and Middle School, a full-time Instructional Support Specialist will be employed by the District until we reach a ratio of 1 Instructional Support Specialist: 60 Instructional Staff Members

BENCHMARK 3 – TECHNOLOGY PROFESSIONAL DEVELOPMENT

Beginning in year one of this plan, staff will participate in high-quality, ongoing professional development that includes emerging technology, technology skills, content-specific applications, and research-based models of integration with the assistance of Instructional Support Specialists. At the outset, professional development will be specific to the unique needs of staff whose proficiency is at the beginning, mid-level, and/or high-level of performance. Professional development will include coaching, mentoring, modeling of best practices, application of skills, and tiered support until all staff attain desired levels of proficiency for technology integration and knowledge. New staff members will also receive specific professional development as part of their orientation program and during their first year of employment in order to reach the necessary level of proficiency.

All Nauset instructional staff members will receive professional development during each of the five years [2014-2019] that includes the embedded use of a high-capacity, internet-connected technology device to further engage, instruct, and assess students within their unique classroom environments. Furthermore, instructional staff will receive training on the effective use of interactive whiteboard technologies and applications that are specific to their role and the population of students with whom they work. Professional development will enhance the use of technology as a tool to build collaboration among students, to improve communication among students, staff, and families, to provide feedback on student progress, and as a means by which content standards are taught in conjunction with critical and creative thinking skills.

Finally, professional development will allow the time necessary for staff members to plan lessons, units, projects, and assessments that improve the teaching and learning process. Staff members will have the opportunity to work with one another as well as with Instructional Support Specialists within the District to refine their use of technology as a tool for education. The professional development plan will also allow the flexibility to adapt to emerging technologies and to remain current with research-based best practices in regard to curriculum, instruction, and assessment.

SMART GOALS – BENCHMARK 3

- Create a tiered system of professional development for instructional staff to address remediation of basic technology skills and to build advanced independent skills throughout the five years of this plan
- Develop technology performance tasks as part of the New Staff Orientation program and provide additional training to new staff during their induction program and their first year of employment
- Create an Educational Technology Committee that will attend technology-based educational conferences in order to investigate new trends and tools in the education field, provide input for revisions to our implementation plan, and develop ongoing professional development ideas for staff

BENCHMARK 4 – ACCESSIBILITY OF TECHNOLOGY

The District provides connectivity to the internet for all devices in all schools and classrooms maintaining a CIPA-compliant atmosphere. The District will immediately move toward meeting the 1:1 standard of a high-capacity internet-connected technology device for each student and staff in grades 6 through 12. The District will also move toward meeting a 1:1 staff-to-device ratio and a 3:1 student-to-device ratio at the elementary level that will allow for the appropriate development of technology skills and the seamless integration of technology use as a tool for teaching and learning.

Classrooms will be provided with current technology equipment including access to digital projectors and interactive technologies.

The District will have an established device replacement cycle of five years or less. Cloud-based resources will be utilized for file-sharing, backups, scheduling, etc. to provide a WAN [wide-area network] concept to our geographically-unique District. This will require investment in the support services for the cloud-based technology. The District will provide desktop technicians [one for every 300-500 devices] to support network and desktop functionality

SMART GOALS – BENCHMARK 4

- Students and staff will have wireless accessibility with the necessary bandwidth for 1:1 device implementation at the Middle School and High School facilities
- Students in grades 8-12 will have a 1:1 ratio of high-capacity, internet-connected devices for use throughout the District by September 2014
- Nauset Middle School and High School staff will have a 1:1 ratio of high-capacity, internet-connected devices for use by September 2014
- Elementary school staff will have a 1:1 ratio of high-capacity, internet-connected devices for use by September 2015
- Elementary students will have a 3:1 ratio of high-capacity, internet-connected devices by September 2016
- A Technology Media Center will be created to safely secure and maintain mobile devices in our technology environment by September 2014
- A Student Help Center will be part of the Media Center by September 2015 with students trained in basic technology trouble-shooting, care, and maintenance

PROFESSIONAL DEVELOPMENT PLAN

The demand for 21st Century readiness for every student challenges school districts to provide tools, opportunities, and resources that fuse the three R's (reading, writing, and arithmetic) and the four C's (critical thinking and problem solving, communication, collaboration, and creativity and innovation). Nauset's mission and vision statements embrace this ideal of preparing our students for a future that is much different than our past. In as much, the Nauset Public Schools exist to educate each student to the highest attainable levels of academic excellence, social responsibility, and cultural awareness.

High quality professional development promotes professional growth that inspires the continual application of newly acquired knowledge and skills in the pursuit of improved student learning. As outlined in Benchmark 3, professional development unique to the embedded use of technology is necessary in order to achieve our mission and vision statements and to have students prepared for life beyond the Nauset School System. Outlined below are details of our professional development plan that will prepare staff to embed the use of technology as a tool for curriculum development and analysis, as an instructional tool, and as a means of assessing students and providing feedback to guide their learning. In addition to these full-day professional development opportunities, the District will continue to offer technology professional development on a variety of current topics and uses during non-school hours for staff members.

YEAR 1: PROFESSIONAL DEVELOPMENT WILL INCLUDE THE FOLLOWING:

Staff New to the District – Technology facility will be assessed and the appropriate training will be provided in the use of technology; such as grading and attendance software. Additional training will be provided as needed with regards to current technology being used at the schools.

All Instructional Staff – Will receive training in the use of:

- tablets and their applications within the curriculum (intermediate, advanced)
- interactive technology/whiteboard training and applications (intermediate, advanced)
- emerging technologies for interactive instruction and their applications
- updated and or new applications and integration within the curriculum
- online learning environments and continued integration of ePortfolios
- content specific unit, lesson, and online assessment planning with peers and technology integration specialist(s)

YEAR 2: PROFESSIONAL DEVELOPMENT:

Staff New to the District – Technology facility will be assessed and the appropriate training will be provided in the use of technology; such as grading and attendance software. Additional training will be provided as needed with regards to current technology being used at the schools.

All Instructional Staff – Will receive training in the use of:

- tablets and their applications within the curriculum (intermediate, advanced)

- interactive technology/whiteboard training and applications (intermediate, advanced)
- emerging technologies for interactive instruction and their applications
- updated and or new applications and integration within the curriculum
- online learning environments and continued integration of ePortfolios
- content specific unit, lesson, and online assessment planning with peers and technology integration specialist(s)

YEAR 3: PROFESSIONAL DEVELOPMENT:

Staff New to the District – Technology facility will be assessed and the appropriate training will be provided in the use of technology; such as grading and attendance software. Additional training will be provided as needed with regards to current technology being used at the schools.

All Instructional Staff – Will receive training in the use of:

- tablets and their applications within the curriculum (intermediate, advanced)
- interactive technology/whiteboard training and applications (intermediate, advanced)
- emerging technologies for interactive instruction and their applications
- updated and or new applications and integration within the curriculum
- online learning environments and continued integration of ePortfolios
- content specific unit, lesson, and online assessment planning with peers and technology integration specialist(s)
- data collection on student work samples and assessments; analysis of data

YEAR 4: PROFESSIONAL DEVELOPMENT:

Staff New to the District – Technology facility will be assessed and the appropriate training will be provided in the use of technology; such as grading and attendance software. Additional training will be provided as needed with regards to current technology being used at the schools.

All Instructional Staff – Will receive training in the use of:

- tablets and their applications within the curriculum (intermediate, advanced)
- interactive technology/whiteboard training and applications (intermediate, advanced)
- emerging technologies for interactive instruction and their applications
- updated and or new applications and integration within the curriculum
- online learning environments and continued integration of ePortfolios
- content specific unit, lesson, and online assessment planning with peers and technology integration specialist(s)
- data collection on student work samples and assessments; analysis of data

YEAR 5: PROFESSIONAL DEVELOPMENT:

Staff New to the District – Technology facility will be assessed and the appropriate training will be provided in the use of technology; such as grading and attendance software. Additional training will be provided as needed with regards to current technology being used at the schools.

All Instructional Staff – Will receive training in the use of:

- tablets and their applications within the curriculum (intermediate, advanced)
- interactive technology/whiteboard training and applications (intermediate, advanced)
- emerging technologies for interactive instruction and their applications
- updated and or new applications and integration within the curriculum
- online learning environments and continued integration of ePortfolios
- content specific unit, lesson, and online assessment planning with peers and technology integration specialist(s)
- data collection on student work samples and assessments; analysis of data

ADDITIONAL TECHNOLOGY WORKSHOPS OFFERED DURING NON-SCHOOL HOURS MAY INCLUDE:

- Digital Tools
- Webpage development and design
- New Apps for tablets
- Emerging technologies for classroom use
- Microsoft Office applications and use
- ePortfolio essentials
- etc.

APPENDIX A – K-12 IMPACT OF TECHNOLOGY PLAN

Nauset Public Schools - K-12 Impact of Technology Plan

Key: X = Achieved; O = Occasionally OR in some schools/classrooms

2009	2014	2019	Benchmarks / SMART Goals established within the Technology Plan
	X	X	A. Infrastructure with wireless accessibility throughout the school building
	X (9/14)	X	B. Increased bandwidth of wireless accessibility to allow 1:1 device use
	O	X	C. Ratio of 1:1 high-capacity, internet-connected device for every instructional staff member, office staff, and school nurse
		X	D. Ratio of 3:1 elementary students per high-capacity, internet-connected device
	O	X	E. Resources [e.g. carts of devices, labs, classrooms with additional technology] to allow 1:1 student-to-device ratio when needed
	X	X	F. Secure storage of files and information with necessary backup
	O	X	G. Interactive technology/whiteboards in every instructional classroom
O	O	X	H. Computer labs with current devices [e.g. desktops, laptops, portables] are readily available for student instruction/teacher use
X	X	X	I. Instruction in technology skills and applications through technology classes at the elementary level [e.g. word processing, keyboarding, databases, etc.]
	O	X	J. Additional courses specific to technology use and careers are available to all students at the Middle School
	O	X	K. Technology-specific courses applicable to college/career readiness are included in the Program of Studies and are available to all students at the High School
	O	X	L. Embedded use of technology skills and applications in core content areas when useful to teaching and learning process
	X	X	M. Management and storage of student and staff information including SIMS, EPIMS, X2 data, etc.
X	O	X	N. Technology Subject Coordinators to support devices, staff, and use of resources in each building
	O	X	O. A tiered system of professional development is in place to support the training of staff specific to technology use
	O	X	P. Use of ePortfolios, online access to student data/scores, and electronic report cards by students, staff, and parents
	X	X	Q. Established Nauset Technology Literacy Standards by grade level are established, taught, and assessed
	O	X	R. Use of cloud-based applications allows access remotely by students, staff, and parents to essential resources, student work, projects, etc.
	O	X	S. Full-time technician to support every 300-500 devices throughout the District

Nauset Public Schools - K-12 Impact of Technology Plan

Key: X = Achieved; O = Occasionally OR in some schools/classrooms

2009	2014	2019	Benchmarks / SMART Goals established within the Technology Plan
		X	T. Full-time Instructional Technology Integration Specialist to model, coach, support staff [1 every 60 instructional staff] with the embedded use of technology
		X	U. Use of eBooks, eNotes, and agreed upon Apps throughout the District to support student skills, organization, and learning
	O	X	V. Students communicate and collaborate with others using technology to problem solve, analyze and evaluate information, and create products
		X	W. An Educational Technology Committee will assess technology tools, services, and courses on an annual basis and make recommendation for changes or additions
		X	X. A Technology Media Center is available to students, parents, and staff to safely secure and maintain mobile devices in use within the District

Nauset Public Schools - Technology Literacy Benchmarks and Expected Outcomes

The impact of the Technology Plan will be evident as students achieve the Grade Span Benchmarks / Expected Outcomes outlined below. These benchmarks are derived from Department of Elementary and Secondary Education [DESE] Technology Literacy Standards and represent the key mastery standards for various grade spans identified by Nauset's Technology Subject Coordinators. For example, the Grade 2 Benchmarks / Outcomes represent the key technology literacy standards for K-2. In addition, there are many additional standards being introduced or developed within each grade level and these outcome statements represent the continuum of learning for students as they move from grade level to grade level across the District. Given Nauset's emphasis on the embedded use of technology into daily teaching and learning, the outcome statements also reflect framework standards from the *Partnership for 21st Century Skills*.

Grade 2 – Benchmarks/Expected Outcomes

Students will be able to:

- Demonstrate proficiency in basic operations including the use of a keyboard, touchscreen, desktop icons, and the beginning steps in applications and available hardware (e.g. launch a program, use a pointing device, open a web browser)
- Identify, locate, and use letters, numbers, and special keys (e.g. space bar, shift, delete) on the keyboard
- Demonstrate ability to use basic tools in painting and/or drawing programs
- Follow classroom rules for the responsible use of computers, peripheral devices, and resources and explain why these rules exist
- With teacher support and guidance, communicate with others to exchange information and ideas
- Work collaboratively with others using digital devices
- Access information given teacher-organized structure and recommended sites/links
- Create a product or problem solve using the skills outlined above

Grade 5 – Benchmarks/Expected Outcomes

Students will be able to:

- Perform basic operations using available hardware and applications (e.g. printing with appropriate page setup and orientation, using taskbars, working w/menus, using multiple programs simultaneously, save/retrieve/delete electronic files on a hard drive or school network)
- Demonstrate intermediate keyboarding skills and proper keyboarding techniques
- Use word processing programs to format, edit, proofread, add images, and print documents
- Provide examples of databases and use existing databases to conduct simple searches
- Use age-appropriate, internet-based search engines to locate and extract information
- Create, edit, and format multimedia presentations that include multiple slides and graphics
- Explain and demonstrate responsible and ethical use of technology and compliance with established school and district rules

Grade 5 – Benchmarks/Expected Outcomes (cont.)

- Recognize and describe some potential risks and dangers associated with various forms of online communication including the identification of cyber-bullying
- Communicate and collaborate online with other students/adults under teacher supervision
- Define and solve problems, make predictions, propose hypotheses, analyze data, and draw conclusions with teacher support
- Create and evaluate projects that use text and various forms of graphics, audio, and video with teacher support and guidance

Grade 8 – Benchmarks/Expected Outcomes

Students will be able to:

- Use features of a computer operating system and a variety of storage media appropriate for the task and purpose (e.g. determine available space on a storage device, access size and format of files, identify version of application, decide if a flash drive, server, or DVD is better storage)
- Demonstrate keyboarding skills between 25-30 wpm with fewer than 5 errors
- Demonstrate use of intermediate features in word processing applications (e.g. tabs, indents, headers and footers, end notes, tables, bullets and numbering)
- Create a simple database and perform simple operations within the database
- Create an original spreadsheet using formulas and various number formats; apply advanced formatting features and produce simple charts and graphs as appropriate
- Use web browsing to access information and demonstrate the ability to explain and correctly use terms related to networks (LANs, WANs, servers, routers), internet connectivity (T1, T3, DSL), and online learning (IP address, thread, drop box, intranet)
- Independently create a multimedia presentation using various appropriate media (audio, video, animations, etc.) and use technology tools to maximize accuracy of work
- Explain ethical issues related to privacy, plagiarism, spam, viruses, file charting, etc., fair use guidelines, and how copyright law protects ownership of intellectual property
- Identify and describe the effect technological changes have had on society and explain how technology can support communication, collaboration, personal and professional productivity, and lifelong learning
- Conduct research including collecting, organizing, and analyzing digital information from a variety of source with attribution
- Problem solve using appropriate technology tools to define problems, propose hypotheses, analyze data, propose solutions, and evaluate problem-solving strategies
- Use a variety of telecommunication tools (e.g. e-mail, discussion groups, web pages, blogs) to collaborate and communicate effectively with peers, experts, and other audiences

Grade 12 Outcomes/Benchmarks

Students will be able to:

- Perform advanced operations including identification of the platform, version, properties, function, and interoperability of computing devices, use of online help and other support, and effective backup and recovery strategies
- Demonstrate keyboarding techniques, including the use of keyboarding shortcuts, to complete assignments efficiently and accurately
- Apply advanced formatting and page layout features of word processing applications and use editing features such as the ability to track changes and insert comments to improve the appearance of documents and materials
- Use database features to create mailing labels, form letters, perform mail merges; demonstrate the ability to duplicate database structures and save database files in various formats
- Create spreadsheets with desired formulas and functions including the use of multiple sheets, links among worksheets, importing and exporting of data, pivot tables, and advanced formatting features to best convey information and create desired graphs and/or charts
- Explain and demonstrate effective search strategies for locating and retrieving electronic information (e.g. using syntax and Boolean logic operators)
- Use a variety of applications to plan, create, and edit multimedia products including the linking of information from different applications
- Distinguish between effective and ineffective website designs and use web-authoring tools to create, edit, and publish a well-organized website with effective navigation
- Demonstrate full compliance with the schools' *Acceptable Use Policy* including the correct in-text citations and reference lists for text and images gathered from electronic sources
- Evaluate the authenticity, accuracy, appropriateness, and bias of electronic resources, including websites and analyze the values and points of view that are presented in media messages
- Explain and utilize practices to protect one's personal safety online including protection of technology systems and information from unethical users
- Conduct research including devising and demonstrating strategies for the efficient collection and organization of information, selecting the most appropriate search engines and directories, and comparing and evaluating appropriate electronic resources
- Create desired products and problem solve with technology tools including the explanation and demonstration of how specialized technology tools can be used for decision making and creative thinking (e.g. simulation software, environmental probes, computer-aided design, geographic information systems, dynamic geometric software, graphic calculators, art and music composition software)
- Plan and implement a collaborative project with students in other classrooms and schools using telecommunications tools (e.g. bulletin boards, discussion forums, list servers, groupware, interactive websites, videoconferencing) and demonstrate how the use of various techniques and effects (e.g. editing, music, color, rhetorical devices) can be used to convey meaning in media

5-YEAR IMPLEMENTATION PLAN

See budget handout

Year 1

- Summer distribution of tablet devices to participating staff members
- Required August/September professional development for all teaching staff
- Fall distribution of tablets to students in grade 9
- Introduction of additional technology courses NRHS

Year 2

- Required ongoing professional development
- Fall distribution to grades 8 and 9
- Introduction of additional technology courses NRHS and NRMS

Year 3

- Ongoing professional development
- Fall distribution to grades 7 and 8
- Year 3 introduction of additional courses at NRHS and NRMS

Year 4

- Ongoing professional development
- Fall distribution to grades 6 and 7

Year 5

- Ongoing professional development
- Redistributing/Recycle year 5 devices

Notes:

Determined by funding option selected

Implementation success requires a continuous budget commitment