



Wayland Public Schools Technology Plan – 2009-2012

February 2010

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WPS Technology Task Force**

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Wayland Public Schools Technology Plan 2009-2012

“Leveraging Instructional Technology to Improve Student Academic Performance”

Wayland Public Schools Mission Statement

Personal and civic responsibility, love of learning, and empathy for others: these are the qualities that Wayland High School seeks to instill in its students. At its core, our mission is to provide a rigorous and stimulating academic environment that promotes the acquisition of knowledge and skills. Yet we deem it equally important to nurture self-confident, collaborative, and conscientious individuals. We strive to create a climate where risk-taking is safeguarded, open expression is encouraged, and free association is protected. Our goal is to advance our students' growth into principled, informed, and capable citizens who will help guide a democracy that follows humanitarian principles in the global forum, and shape a just society where individuals may reach their full potential.

Benchmark 1 – Vision and Implementation Strategy

Vision

Wayland Public Schools is committed to the effective integration and meaningful use of instructional and information technologies to support, enrich, and extend student learning throughout the curriculum. Through integrated learning experiences, students will develop the technology literacy needed to acquire and manage knowledge, to succeed in school, and to thrive in an ever-changing, globally competitive world. In the Wayland Public Schools, all members of our school community will use technology to excel as learners and develop as leaders. Technology is a means for learning, not an end product of learning. Thus, technology will play a vital role in a personal 21st century process of teaching and learning that incorporates critical thinking, problem solving, creativity, collaboration, contextual learning and information technology.

To achieve this vision, Wayland Public Schools is committed to providing access to:

- an enterprise class infrastructure (network, hardware, software) that maximizes learning opportunities and provides connectivity to the global community;
- appropriate resources and support for the advanced use of technology in teaching and learning;
- relevant and ongoing professional development to foster the meaningful integration and innovative use of technologies to meet the needs of diverse learners; and
- a dynamic website to promote communication and interaction with the Wayland Community.

WPS Technology Task Force

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Mindy Johal	Curriculum Leader, ELA & Social Studies
Mary Barber	WPS Technology Integration Specialist
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Jeremy Berhle	Parent, VP Juniper Networks
Jon Bower	Parent, it's Learning
Andrew Bonvie	Parent, MIT IT
Dale Bentley	Claypit Hill School Art Teacher
Daniel Goessling	Community Member, IBM
Ken Cundari	Parent
Carrie Antonini	Parent
Eric Bucher	Community Member
Melissa Orlov	Parent
TBD	Student

Short-term Initiatives

- "Firm up" the direction of the Technology Task Force.
- Pilot the roll-out of the latest version of Lexia Learning System's reading software, to show a curriculum-technology integration and work towards a more standardized and user-friendly (as opposed to security-friendly) system.
- Continue to provide, and improve on, professional development for teachers.
- Provide laptop computers for teachers who don't have either a district or personal laptop, and allow those with personal laptops to access as much of the system as possible without creating security problems.
- Expand the deployment of appropriate projection/display technology in classrooms.
- Deploy technology to ease administrative tasks: for instance, assessment and grading.
- Continue to replace obsolete technology on an annual basis.
- Continually review the technology plan and the technology audit for other key items.
- Update the technology plan based on findings from the technology audit and ongoing School-based Technology Committee meetings.

Long-term/Visionary goals

- Technology objective
 - Improve educational outcomes and/or cost-effectiveness through the application of education and information software and hardware technology in the areas including but not limited to instruction, practice, assessment, professional development, and logistics.
- Inform direction via
 - WPS technology history
 - WPS curriculum goals
 - WPS current technology plan
 - WPS technology audit
 - MA DOE Curriculum Framework
 - Benchmarking against/best practices of local peer districts
 - Benchmarking against/best practices of Project Blueprint districts
 - Benchmarking against/best practices of national/international districts
 - Initiatives such as the Bill and Melinda Gates Foundation and [Edin08](#)
- Work towards a "standard system" that is friendly to well-designed applications.
- Resolve where we want to be on the user-friendliness/security spectrum
- Study the question of whether we should continue to fund technology on an "even" annual basis or make major technology purchases less frequently (every 4-5 years).
- Review technology audit document regularly for additional items
-
- Evaluate uses of collaborative technologies for students and teachers and begin pilot deployments where appropriate, implemented through one to one classroom initiative

Needs Assessment

The Technology Task Force will work with staff and students through our building-based technology committees to continually assess existing and emerging technologies. As an oversight committee, we will define and set District goals based on these school-based assessments. Assessments will be conducted at the end of every year and reported as part of the Superintendent's Yearly Report presented in July.

- Assess Technology Products and Services to improve teaching and learning.
- Assess Products and Services to improve administrative tasks, provide greener solutions and to stay current with emerging 21st century methodologies and technologies.

CIPA-compliant Acceptable Use Policy (AUP)

The CIPA Compliant AUPs are posted on the WPS website. They will be reviewed and updated by the Technology Task Force during the 2009-2010 school year.

Faculty / Staff

http://www.wayland.k12.ma.us/district/district_info/departments/technology_office/tech_handbook.htm#I

Elementary School

http://www.wayland.k12.ma.us/district/district_info/departments/technology_office/tech_handbook.htm#A

Secondary School

http://www.wayland.k12.ma.us/district/district_info/departments/technology_office/tech_handbook.htm#B

Budget

The district budget includes detailed line items for technology equipment and supplies, software, professional development and contract services. There is also a Town of Wayland Capital Budget that includes details on a ten year plan for capital expenditures for the network and computer hardware infrastructure expansion and upgrades. Details can be found at the following Wayland website pages.

Capital Budget

http://www.wayland.k12.ma.us/district/district_info/departments/technology_office/index.htm

- Computer Hardware

Operating Budget

http://www.wayland.k12.ma.us/district/district_info/departments/superintendent/reports.htm

- Computer Repair
- Contract Services
- Office Supplies
- Computer – New, Parts, Supplies, Accessories
- Printer - Parts
- Software License
- Membership - Professional
- Conferences
- Network - Hardware
- Network - Software License
- Network - Maintenance
- Mileage Reimbursement

The Wayland Public Schools currently files E-Rate applications for Internet access charges, local and long distance telephone costs, cellular phones for in-district use and pagers for emergency contact. All of these expenses are charged to accounts in the facilities cost center of the school department's general fund budget. E-Rate reimbursement comes in the form of a check. These funds supplement technology expenditures.

Evaluation

Ongoing online evaluations will be conducted with staff, students and the community to assess progress and update the technology initiatives set forth. The Department of Education's TSAT (Technology Self-Assessment Tool) is conducted yearly to assess teacher knowledge and skills. Student assessments are also conducted every Spring and we are in the process of identifying the most efficient way to assess student knowledge.

Benchmark 2 – Technology Integration and Literacy

Technology Integration

Our 1:1 teacher laptop initiative will include best practices for 21st century teaching and learning through technology-rich integration methodologies. The teachers initially receiving the laptops will act as teacher-leaders to model lessons and provide professional development to other teachers. We will continue to look at best practices in technology integration and create a small repertoire of integrated technology lessons to support this growth. Regular professional development, training and follow up will include a blended learning approach, where teachers will meet, learn, and then continue with instruction through the use of online collaboration and learning tools that embrace Web 2.0 technologies and methodologies. These trainings may occur before school, after-school and during school hours. Our belief is that by beginning with a small repertoire, many teachers will then gain confidence and either create their own lessons that integrate technology, or feel more confident in choosing existing suggestions from the abundant curriculum information that is online. This will allow us to continue the growth of this 1:1 teacher laptop initiative, teacher literacy and student technology integration. Professional development opportunities will also include a collaborative effort between curriculum and information and integration technology specialists.

Action Plan

- Begin 1:1 teacher laptop initiative
- Provide a summer technology institute for teachers receiving laptops, expand that institute into an online course offering
- Move to Google Apps for online collaboration and communication
- Summer work - have a technology thread added to curriculum summer work projects
- Technology curriculum planning - bring technology specialists and grade level teachers into these conversations
- Include a technology thread in curriculum in-services/professional development
- Building-based technology committees - use these committees to foster conversations around technology literacy and integration [have cross-elementary tech committees and K-12 tech committees], include students at the appropriate levels
- Discussions - any means by which we can bring all investors to the table (classroom teachers, technology specialists, administrators...) to build and support technology literacy
- Resources Website - have a robust website of "How To's" and in-service documents; revamp our current elementary curriculum connections pages and all web pages

- Conferences - bring a small contingent of staff to technology conferences, not just technology specialists
- Research best practices and model them

Big Picture Vision

- We see a purposeful process to technology integration where we look at tools and content issues that were helpful in sorting for best implementation practices; such as Harris' categories and Hannafin's guiding questions.
- We will identify who is responsible for this, when these opportunities are available and how we will support it for the long haul (not just get started and then fizzle out).
- Integrated lessons should not be an "add-on" to what teachers already do. The lessons should be purposeful and improve the lesson and the experience for both the teacher and student. For example in the third grade science unit on plant growth students are asked to measure and record the height of their plant. Rather than a paper pencil task, students could enter this data on a graphing program to create a bar graph of their plants growth over time. This would build in, long term, the things we see in the action plan.

Technology Literacy

Collaboration of an active, committed Administrative Team and Technology Team will be paramount in moving WPS forward with all Instructional Technology initiatives.

- Professional development to build basic teacher skills will be integrated into all professional development for staff, teachers, and administration
- Professional Development on software standards and instruction technology integration methodologies will be provided
- Massachusetts Instructional Standards for 21st century teaching and learning related to technology will be integrated into the curriculum
- In-class support and collaboration among teachers and technology support staff will be fostered
- Access to instructional technology, including interactive whiteboards, computer labs, portable computers and other hardware devices will be increased
- TSAT will be used to assess teacher knowledge
- A formal student assessments will be developed and conducted in grade 8

Staffing

- Leisha Simon, WPS Director of Technology and Accountability
- Albie Cincotte, Network Technician
- Eva Santos, Data Analyst
- Susan Ginsberg, Systems Analyst
- Augusto Saviatto, AD/PC Technician
- Joseph Anselmi, Apple/PC Computer Technician
- Mary Barber, Integration Specialist
- Beth Ann Monahan, Integration Specialist
- Bethann Crozier, Integration Specialist
- Nancy Colbert, Integration Specialist
- Rita Partridge, Integration Specialist

Benchmark 3 - Technology Professional Development

- Technology integration must be a stated District priority.
- Teachers/grade levels/departments review technology frameworks to (1) determine the progress of technology skill integration in the curriculum and (2) identify opportunities to foster further integration. Technology specialists can facilitate this review and help determine which student outcomes are addressed and which need further development. The curriculum integration subcommittee concurs, recommending that all educators, teachers and administrators alike, review the technology standards. This exercise will help everyone understand what standards must be met and should help to design professional development to meet and exceed those standards. (3C)
- Annual staff individual goal setting includes meeting instructional technology frameworks through professional development and curriculum integration efforts. (3D)
- All professional development initiatives include a technology integration strand. This can be fostered by including the Technology Director or a technology specialist in all professional development planning at district, department, grade and curriculum levels. (3B)
- Administrators develop an action plan for understanding and evaluating effective technology integration. (3D)
- Create a Professional Development Wiki that can be updated by staff and used as a portal to offer blended learning opportunities that include online resources. (<http://wayland-pd.wetpaint.com/>)

SCHEDULING AND PROFESSIONAL DEVELOPMENT OPTIONS

Flexible scheduling for in-service Wednesdays can offer ongoing technology professional development opportunities.

- Study Groups (3B) (Tech Audit, p.7: "Each school should continue to host regular opportunities for teachers who are using these tools to share with their peers.")
- Grade level/department/curriculum initiatives can provide opportunities to integrate technology with a team of teachers. Members of the technology team can offer insights into key technologies that may readily support the teaching and learning goals of the department/grade level team. (3A, B) (Tech Audit, p. 24: "Teachers also recommended that technology training be done in the context of curriculum.")
- Create a menu of professional development options that focus on needs identified by a review of technology frameworks. (3C)
- Integrate technology in ongoing, diverse professional development efforts and technology professional development will happen in parallel. (3B) By enlisting the support of the technology specialists early in the planning stages for other district, curriculum and/or building level professional development efforts, technology connections that support and enrich these efforts can be identified.

Establish building schedules that accommodate special projects. Provide opportunities for teachers to plan with the technology specialist in order to foster improved integration.

- Combined one-hour blocks of library and technology for upper elementary classes for meaningful integrated projects that connect classroom work with technology classes for up to a month (followed by another month in library). (3A, B)

- Tech Days for teachers interested in pursuing professional development during the school day (A substitute teacher covers several different classes for individual one-hour periods.). (3A, B)
- Invite elementary teachers to co-plan and attend technology classes with their students for additional professional development and curriculum integration opportunities. (3B)

FY10 Update - Professional Development initiatives (funded in the operating budget) focus on integrating technology into all curriculum based training. Teachers develop lessons using the technology based resources and learn as they do so. In a recent training session on Everyday Math, teachers brought laptops and learned how to install the teacher component and how to use the online resources for teaching and learning. Technology instruction was integrated into the curriculum instruction. Wayland's Integrations Specialists also work one on one with teachers to assist them in incorporating lessons that are rich with new technology resources and provide before, during and after school sessions for teachers. Many teachers are signing up for Virtual classes for teachers through VHS. (<http://www.govhs.org/Pages/ProfDev-Home>) and through other resources (<http://wayland-pd.wetpaint.com/page/Fee+Based+Online+Courses>) Our first Annual Digital Boot Camp was held in August 2009 and teachers attended these sessions to learn about Google Gmail and Google Applications for use in administrative and instructional settings. We plan to begin our own online Moodle (<http://moodle.org/>) initiative for teachers for Professional Development in FY11.

Benchmark 4 - Accessibility of Technology

Technology Policy - Selection, Use and Implementation

The group recommends the establishment of a Technology Oversight Committee (made up of 1-2 teachers, an administrator, a student, a technology group representative and 1-2 parents) that would review ongoing policy, provide guidance and facilitate the process of procuring and implementing technology to support the curriculum and administrative functions.

Technology Oversight Committee - Mission Statement: to oversee the process of evaluating, enabling and facilitating the academic and administrative use of technology system-wide in a secure fashion.

Background: There are currently policies controlling the use of technology that appear to affect the accessibility of technology in favor of security. Most of the policies appear to be set of necessity by the technology group in the absence of administratively developed policies. A broader group representing the user community that includes technology staff representation should develop policies that support a better balance.

Network Performance – LAN, WAN & Internet Reliability

The goal here is to establish a comprehensive plan and strategic vision to optimize network performance, insure reliability and improve operating efficiencies. The group recommends a

more comprehensive evaluation of the network and servers to identify performance issues throughout the system including individual schools and the district/town. A subgroup of the Technology Oversight Group would be recommended to focus on this long term initiative.

The goal would be to determine how to redesign the network and system to support the overall technology goals of the school system and possibly town functions. This may include looking at centralizing management of the schools and town to maximize efficiency and/or looking at ASP or hosting options for various services such as backup, server support, and specific application needs.

As part of this process it is recommended that the group work with the selectmen to contact local carriers to negotiate support in creating a possible high capacity town-wide WAN.

Background: Due to multiple factors such as funding, staffing, and policy, the network has grown beyond its originally intended design creating a difficult to support environment. The current bandwidth both internal to the local WAN and to the Internet appears to be insufficient. A centralized or combination of centralized and hosted services would likely improve service and reliability. Increasingly, educational services and curriculum are web-based and the schools need additional bandwidth to be able to perform at an acceptable level.

FY10 Update - Dedicated fiber installation cuts costs and improves performance through centralized services and improves educational resources through virtualized program access. It has also allowed us to introduce Thin Client computing not only on new computers but also on older MAC computers, thus extending the life of our old, out-dated computers. Long-range savings will be incurred from improved performance, reduced hardware needs and easier centralized IT management of expanded usage. The fiber installation will be completed in FY11.

Reliability - Network, Systems & Service

The recommendation is to develop a small subgroup that would meet regularly to understand what issues are affecting technology reliability so that responses can be properly prioritized. Possibly this would be a teacher & technology staff member at each location that reports issues in a tracking system that is reviewed weekly by the subgroup (possibly made up of a teacher, technology staff member & administrative representative).

If students or teachers perceive the systems as being unreliable, innovative use of technology will not flourish. Therefore, maintaining reliability is a key part of the plan.

Background: The group determined that there are certain issues that are affecting the stability and reliability of the networked systems. These may or may not be tied to insufficient network bandwidth, but the recommendation is to develop a system that tracks these issues and allows staff and teachers to prioritize and focus the department's support team to best handle these issues.

Ease of Use – Teachers, Students, Administration, Parents & Support Staff

The network configuration, policies, system design and computer setup should allow ease of use primarily for teachers and students, and ideally for administration, parents and the technology support staff. The goal is to promote a more open and reliable computing environment, to foster creative and effective teaching/learning as well as a tighter and natural integration of technology in the curriculum.

1. The first recommendation is to assign non-managed or minimally managed laptops to teachers. This will allow them to use the technology they find most appropriately supports their efforts and to have creativity with regards to integrating technology into the curriculum.
2. The second recommendation would come in the form of improved email communication with parents via centrally generated listservs (electronic mail distribution lists). The plan would be to have listservs set up centrally for teachers by classroom and group, allowing parents to subscribe and unsubscribe directly. This would create a uniform and reliable way to facilitate communications.
3. The third recommendation is to develop a standard desktop by grade and/or status (teacher, 1st grade, staff, etc.) that simplifies options available and creates a more uniform feel to the technology experience.
4. Fourth, the group recommends taking a look at distributed control & responsibilities to support students, administration and teachers on-site. Part of this should fall under the policies heading, but enabling the local technology staff and then possibly implementing proactive network management tools for the centralized staff could greatly enhance the user experience.
5. Finally, ease of use assumes access, that there is enough hardware and software in the schools for teachers and students to use on a regular basis including computers, space for equipment, smartboards and projectors.

Background: Ease of use includes a certain comfort level with the technology that invites people to use it and to begin to explore. Enabling more control and support at the local level is one way this can happen. Other ways are to centralize processes that are universal so that more technical folks can handle them. A uniform look and feel also provide a level of comfort.

FY10 Update - The NEW Teacher Computer Initiative (TCI) places computers in the hands of all teachers and empowers them to develop new teaching methodologies. TCI empowers the teacher to develop rich lessons through the use of technology and provides professional development on computer maintenance and use. As teachers build their expertise they will continue to use the technology for interactive instruction, assessments, and remediation. This is an important step in developing a school system that fully incorporates 21st century teaching and learning methodologies. In particular, the District will focus on teaching approaches designed to meld with the FY11 Student Computer Initiative (see below).

The Student Computer Initiative (SCI) is the beginning of a model 21st century school design in preparation for the opening of the new High School in 2012. The goal is to expand on teaching

and instruction at the High School with online project based methodologies that are similar to those used in higher education and the workplace. The plan for FY11 is to implement student computer usage in a systematic way based on current efforts (see the second link under question 5 in the “Answers to frequently asked questions” section later in this document).

A pilot-scale initiative will provide students with computers for in-school (not take-home) use from “pools” of computers available in selected departments. The pilot will integrate current and new classroom instruction with the use of a Course/Learning Management System/Virtual Learning Environment such as Moodle (<http://moodle.org/>). This will foster a movement to instruction that is rich with online resources and 21st century teaching and learning methodologies. Professional development for teachers will focus on the use of the Learning Management System to support the blended/hybrid/online learning integration.

The objective of the pilot is to define a broader, comprehensive implementation plan for all of Wayland Public Schools, whether via the pool approach or a true student 1:1 initiative in which students would be assigned computers for school and home use. In addition, the District will experiment with student/family supplied computers with an eye towards having students supply the majority of computers, redeploying the District computers to those students who do not have or choose not to use student/family supplied computers. The District will also pursue private fund-raising, for instance from alumni and/or local/national companies, to partially offset the cost of the SCI.

Implementation details: (a) Technology will be fully integrated into the Curriculum. (b) Professional Development for Teachers will include an introduction to the Learning Management System and the delivery of Hybrid Professional development over the summer focusing on 21st century teaching and learning methodologies. We will offer PD in-house, through the Learning Curve, VHS, and/or other online course options. (c) Five teachers will work together in an Inter-disciplinary Professional Learning Community to craft implementation plans and strategies that work well for future growth in our Wayland Community. They will document successes and failures and share with the entire staff. (d) All students involved will sign an acceptable use policy and take a pre and post assessment based on Technology Standards required by the State of MA for all graduating seniors.

The Student Computer Initiative (SCI) has two distinct plans. In the Elementary Schools, the plan is to maintain two computer labs and eventually a pool of five computers in each classroom for a consistent ‘workshop model’ integration. This represents 380 classroom computers and 130 lab computers for Claypit Hill, Happy Hollow and Loker Schools.

Benchmark 5 - E-Learning and Communications

Wayland vs. Benchmarks

- A. District encourages development & use of innovative strategies
 - Not encouraged
 - Allows if space and money provided for delivering specialized courses through the use of technology
 - Very few examples/courses: Honors Computer Science
 - Some modules within a course : Lego Robots in Principals of Technology
- B. District deploys IP-based connections for access to web-based and /or video learning
 - Yes, in pockets – i.e. United Streaming
 - Challenging - some computers are located where bandwidth not optimal
 - Limited access to certain sites (e.g., YouTube, social networking sites are blocked)
 - Students can't hook up personal laptops
 - No media server
 - Use is teacher driven
- C. Classroom applications of e-learning include courses, cultural projects, virtual fieldtrips, etc
 - Limited (virtual field trips)
 - email cultural exchange in language courses
 - No online courses but online discussions through Moodle are incorporated in many classes (blended course)
- D. District maintains up-to-date website with information for parents and community members
 - Yes, basic but under revision
 - Course info is teacher-specific and limited
- E. The district complies with Federal & state law for archiving electronic communications by staff & students. The district informs all staff & students that info on line may be a public record.
 - Archive - No. Backup is done but retrieve and search is not available.
 - Public record -Yes

Conclusion:

- 1) We meet letter of benchmark, but we don't actively encourage eLearning
- 2) The burden falls on individual teachers – if they want to pursue it, we support them.
- 3) eLearning is not properly integrated into the curriculum-we are reactive not proactive. We need to focus on the expansion of this initiative for staff and students.

Immediate Goals

- 1) Develop one technology theme for each year for the entire staff to accomplish
 - a) provide support for collaborative learning:
 - i. Student-student
 - ii. Student-teacher
 - iii. Student-outsiders (e.g., Falmouth, MA and Woods Hole)
- 2) Focus on PD and curriculum integration
Teacher-teacher collaboration using same tools
 - a) Include in each teacher's objectives for performance evaluation and feedback
- 3) Create technology leads among teachers
 - a) Work with technology specialist
 - b) Set up by grade or department
 - c) Responsible for developing curriculum using technology (set goals)
 - d) Responsible for teaching others to use it
and those trained in it then get technology (next year)
 - e) Extra stipend (next year)
- 4) Publish tech success stories
 - a) School vehicles
 - b) Town paper
- 5) Create a Professional Development Wiki that can be updated by staff and used as a portal to offer blended learning opportunities that include eLearning resources. (<http://wayland-pd.wetpaint.com/>)

Long Range Goals

- 1) Develop comprehensive technology/curriculum PD
 - a) Create time for it
 - b) Make tech use a priority in objectives and evaluation
 - c) Ensure teachers assist each other
 - d) Show teachers how to use Tech resources
- 2) Arrange for access to online courses
 - a) Mass Colleges Online
 - b) Virtual HS. (25 seats for each teacher providing an online course)
 - i) Start w/ access after school for students. & townspeople
 - ii) Provide online electives
 - iii) Move forward online core courses
- 3) Include technology in hiring criteria for all positions
 - a) demonstrate sophisticated use in previous position
- 4) Develop a model for reducing instructional costs through technology
 - a) Find examples
 - b) Find reports

References

<http://www.ed.gov/about/offices/list/os/technology/plan/index.html>

<http://www.ed.gov/about/offices/list/os/technology/plan/2004/index.html>

<http://www.ed.gov/about/offices/list/os/technology/plan/2004/site/edlite-default.html>

<http://www.doe.mass.edu/edtech/>

<http://www.doe.mass.edu/edtech/planning.html>

<http://www.doe.mass.edu/edtech/standards.html>

<http://www.iste.org/>

<http://21stcenturyskills.org/> (This is just one of my favorite sites – it is not just technology goals . . . but all initiatives we should be addressing. FYI)\

Other Notes of Reference

- Pilot the web version of Lexia (a competitor to CLT: www.lexialearning.com)
- Look at other programs for assessment and remediation

Open Source

- <http://community.k12opensource.com/>
- <http://mossig.wordpress.com/>
- Wireless Generation's freereading.net (WGen is a competitor of Sopris West/CLT: www.wirelessgeneration.com)
- California Open Source Textbook Project (www.opensourcetext.org/).

DIBELS training via the Florida Center for Reading Research

- www.fcrr.org/dibelsonline/dibelsonline.htm
- <http://www.fcrr.org/assessmentscreeningprogressmonitoring.htm>

Technology Department Policy

- Provide access to network administration tools and passwords for technology specialists, technicians and technology
- Create a rotating schedule for all technicians to facilitate prompt and regular support in each school
- Protocol for emergency, on-call technical support – Through the creation of the Help Desk
- Schedule existing personnel to provide network administration coverage before, during and after school

Technology Staffing Needs

While there are costs associated with additional staffing, the value of technology assistants should not be underestimated. Whether existing school staff is reassigned or extra staff is hired, the extra measure of increased technology support can be the difference between success and failure, be it an individual lesson or the entire initiative. Given the many competing demands for a technology specialist's time, it is professional development and support of curriculum integration that suffer when staffing is inadequate. With the support of a technology assistant, technology specialists can provide more professional development when teachers are available and focus more on helping classroom teachers with technology integration (3B). In recent years, technology positions have been cut. The recommendations of Wayland's Technology Plan for 2008 staffing can be met with an additional 0.4 FTE technology specialist (two 0.2) and 1.5 FTE technology assistants:

- Full-time technology specialist (now 0.8) and one full-time assistant at the High School
- Full-time technology specialist and one full-time assistant (now 0.5) at the Middle School
- Despite the recent reorganization of the elementary buildings, the combination of scheduled technology classes, professional development benchmark requirements (3A) and technical support needs merits increasing elementary staffing to three technology specialists (now 2.8) and 1.5 technology assistants (now 0.5).

Technology Vision 2010

Professional Development

- Online Courses
- Curriculum Based Learning

Student Tech Mentoring

Parent Tech Mentoring

Student Laptop Initiative

- Identify Computers & Specs / Usability