



# Waterford School District Technology Plan 2015

## SECTION 1 – Cover Page Technology Plan Summary Sheet

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<b>Intermediate School District:</b> Oakland Schools	<b>Technology Plan URL:</b> <a href="http://www.waterford.k12.mi.us/pages/51306/annual-reports">http://www.waterford.k12.mi.us/pages/51306/annual-reports</a> Click on <b>District Technology Plan</b> .	
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## **SECTION 2 - Introductory Material**

The Waterford School District is located in central Oakland County and serves four charter Townships – Waterford, Independence, White Lake, West Bloomfield, and the City of Lake Angelus. The district encompasses 42 square miles and educates approximately 10,200 students.

Nine elementary schools and one early childhood center serve approximately 4600 students each school year. There are two middle schools for students in grades six through eight, two high schools and one alternative high school. These secondary schools employ staff and teachers dedicated to educating approximately 5600 students. All school libraries are partnered with the Waterford Township Library and are supervised by the county librarian.

Kingsley Montgomery School (KMS), is a special education facility that provides support for severe cognitive impaired (SCI), severe multiply impaired (SXI), post secondary cognitive impaired (MoCI), and severe emotionally impaired (SEI) students. Kingsley Montgomery School currently provides center-based support for SXI and SCI students who are 3 to 26 years of age throughout the county.

Children’s Village School is a North Central Association accredited facility owned by Oakland County and operated by the Waterford School District. The school serves children in grades K-12 who have been adjudicated via the Probate Court for delinquency, neglect, truancy at home/school, or incorrigibility at home/school. These students come from all 28 school districts in Oakland County, other counties within the State of Michigan and also some out-of-state students.

All Waterford schools are accredited by the North Central Association of Colleges and Schools and hold state accreditation.

### **Waterford School District** **Mission Statement**

**WE PROVIDE EXEMPLARY EDUCATION FOR ALL STUDENTS WHILE DEVELOPING THE WHOLE LEARNER IN A SAFE AND CARING ENVIRONMENT. OUR STUDENTS WILL THRIVE IN A RAPIDLY CHANGING, INTERCONNECTED AND COMPETITIVE WORLD, SUPPORTED BY COLLABORATIVE RELATIONSHIPS WITH STAFF, FAMILIES AND THE COMMUNITY.**

In keeping with the Waterford School District mission statement, we will continue to empower students and staff with the use of technology as a tool for learning, a means of widening access to information, and as a methodology for processing information in a productive and stimulating educational environment.

### Section 3: Technology Vision Statement

#### Inspire, educate and empower students for a technology-rich world!

Students, staff, and community members interact successfully in an evolving technological society. Our students learn and apply technology skills while they prepare to fill the expanding need for a technologically competent workforce. All stakeholders skillfully and responsibly use technology to access, retrieve, apply, analyze, create and communicate information effectively as they become life-long learners.

The vision is accomplished as:

- Technology is integrated into student-centered learning environments with real-world connections to improve student learning.
- Students engage in learning practices that encourage innovative ways of thinking, understanding, analyzing, constructing knowledge, and communicating results.
- All members of the learning community access a variety of technologies which are used in a thoughtful, ethical and equitable manner.
- Community members are actively involved in supporting, planning, implementing and sustaining the district's technology plan.

#### Goals:

1. The *National Educational Technology Standards (ISTE Standards)* will be integrated into core curriculum courses.
2. All staff will participate in ongoing professional development that supports teaching and learning with technology.
3. Increase access to technology for all students, staff and members of the community.

To support both the district mission and the technology vision statement, we must prepare our students for a technologically dependent global society. Our first goal is to integrate the *National Educational Technology Standards (ISTE Standards)* into core curriculum courses. These standards include skills such as communication, collaboration, critical thinking, problem solving, creativity and innovation, which are also considered essential in the Framework for 21<sup>st</sup> Century Learning. We will continue to add technology components to units in the core areas at both the elementary and secondary levels. Separate documents, which establish the technology to be infused into the curriculum, will be created for grades K-5.

The second goal is to have all staff participate in ongoing professional development that supports teaching and learning with technology. For the first time, all teachers will have the ability to display their computer screen for all students to see on either a SMART Board or a large screen TV. The professional development will address specific program needs and use of the classroom technology available to teachers to deliver instruction.

Additionally, all staff must know how to navigate our SharePoint site in order to access information relative to their position. This site contains all of our shared curriculum libraries, assessments, assessment results, and collaborative sub-sites, which include shared document libraries. All

administrators and teachers must know how to find curricula and be able to retrieve and analyze results of common assessments from the Report Center in ORCA and from NWEA. Teachers will use the data in a meaningful way to guide and adjust instruction to improve student achievement (e.g. use of summary reports, item analysis, and standards summary reports). This need will be addressed as part of our professional development goal.

The goals in this technology plan will be addressed in coordination with school improvement plans. School improvement plans are developed and implemented by school-based teams that work collaboratively so that both building level and district level goals for students can be identified and correlated, and then achieved through effective planning, problem-solving, and assessment. Each such team includes professional and support staff, students, parents, and representatives of the community. Each school's improvement plan includes a mission statement; goals based on academic outcomes; curriculum aligned to the goals; evaluation procedures; staff development; use of community resources and volunteers; decision-making processes; the role of adult and community education, libraries, and community colleges. Collaboration occurs at both the building and district levels with parents, relevant institutions and groups, especially those in the community, who can support school improvement in the district. This process is implemented through the NCA/AdvancED model.

The Professional Learning Communities (PLC) model drives both the district and building school improvement process in conjunction with NCA-AdvanceEd. In PLC, there are four questions that drive all of the work: What do we want our students to know, how will we know that they know it, and what will we do if they didn't learn it, and what do we do if they already know what we want them to know. Through our PLC work, the district understood the need to be able to clearly identify what we wanted students to know through a guaranteed curriculum. We needed a means for figuring out how to assess if students learned what we wanted them to learn through a meaningful, yet fast and friendly assessment system.

Most recently, the district implemented a comprehensive online assessment program for grades K through 10. NWEA (Northwest Evaluation Association) is a highly regarded, non-profit, educational service organization with over 30 years of experience developing adaptive assessments based on educational research. The assessments are fully aligned with the State curriculum model and have been used by many of our neighboring districts in Oakland County for years.

MAP assessments are unique in that they adapt appropriately to each student's level of learning. As a result, teachers can pinpoint with specific accuracy, not only the student's level of understanding, but also mastery of specific concepts in each area. This provides teachers with the ability to truly address each student's individual academic needs, through programming and materials. This rollout will require ongoing professional development in order to ensure that teachers understand how the data can be used to drive their instruction for learners at all levels.

The need for the intentional use of data, led us to the implementation of the Data Teams Process. This process involves PLC teams using data to target their teaching for students that already know the content, those that will likely learn the content with general classroom instruction and those who will require more in-depth intervention. Through our Online Resource for Curriculum and Assessment (ORCA) and through the reports provided by NWEA, teachers have access to assessment data in a timely, almost instant manner so that the information can be used to affect teaching practices immediately. Now that

this data teams process for measuring student growth is a part of every teachers' and administrators' evaluation, all staff have been taking this very seriously.

The final goal, to increase access to technology for all students, staff and members of the community, continues to be a priority as we strive to meet technology needs to support curriculum, instruction, online testing, online learning, and daily operations.

## **SECTION 4 – Curriculum Integration**

Curriculum development in the Waterford School District is an ongoing process. Teachers, administrators and support staff collaborate on a regular basis to insure that the curriculum is aligned with state and national standards and that our assessments appropriately measure student achievement. Professional Learning Communities have been established in each building. Professional Learning Community Leaders (PLC Leaders) are teachers or administrators who are united in their commitment to student learning. They work collaboratively with their building staff to create shared goals, assess student achievement, and improve their own teaching practices.

Additionally, the district supports teachers who work on curriculum teams along with content area consultants to develop units and assessments in the core curriculum areas. Technology components are embedded into the units where appropriate to improve content delivery and increase students' information literacy and technology skills.

### **Objectives/Goals-**

- 100% of core curriculum staff will utilize resources integrating technology into the current curriculum by June 2015.
- Elementary Students who fall within the district bottom 30% in mathematics will be provided with intervention using a computer adaptive program (Dreambox) to improve their conceptual understanding

### **Action Steps**

- Continue to develop awareness of the ISTE Standards .
- Create awareness of the SAMR model for technology integration.
- Create awareness of Tech Best Practice website which connects technology with *Classroom Instruction the Works*. <http://www.techbestpractice.net/>)
- Add to and edit the *technology integration map* with recommendations for each subject area and grade level (K-5)
- Connect teachers to a Moodle course for learning about new technology for classroom use. Include links to ISTE Standards, Framework for 21 Century Learning and the SAMR model.
- Set up accounts at distric level and provide support to Dreambox point people in each building
- Maintain the Waterford Weebly website for elementary students

Curriculum teams will use the ISTE Standards as a reference to update the district Elementary Technology Integration Map. This document will be a simple matrix crossing grade levels with content areas, assuring that the integration occurs throughout the curriculum (see Figure 1.)

<b>Elementary Grades Technology Integration</b>		
<b>Highlighted items indicate grade level recommendations for the 2014-2015 school year. All other items are suggested resources only.</b>		
<b>Kindergarten</b>		
<b>Subject</b>	<b>Unit/Lesson</b>	<b>Resource</b>
ELA	<b>Illustrate a story within any unit</b>  <i>Possible units to use Paint in:</i> <i>Writing Unit 2 - Concept Books</i> <i>Writing Unit 4 - Personal Narrative</i> <i>Writing Unit 5 - All About Books</i> <i>Writing Unit 6 - How To</i>	<b>Paint</b> See teacher resource <i>Microsoft Paint Lesson K-1</i> in ORCA Curriculum Library under <b>All Else</b>
Math	Use websites in the units 1 – 6, which are listed on the Waterford Weebly website	<a href="http://waterfordschools.weebly.com/">http://waterfordschools.weebly.com/</a>
Science	Graphing – Teacher uses the spreadsheets in ORCA and inputs student information for electronic display.	Excel files in the ORCA Curriculum Library under <b>All Else</b> <a href="http://resource.waterford.k12.mi.us/teachers/elementary/Grade%20K/Fo rms/Summary.aspx">http://resource.waterford.k12.mi.us/teachers/elementary/Grade%20K/Fo rms/Summary.aspx</a>
Social Studies	Unit 1 - Who Am I, Lesson 3 – I Know About Time	SMART Notebook – Open the file called <i>Order and Clock</i> . This

Figure 1.

The *Curriculum Integration Map* will be used to organize for teachers grade level technology recommendations as well as optional suggestions.

**Monitoring/Evaluation**

- Use ORCA to survey teachers regarding integration of technology into units. Include in the survey a means to identify professional development needs in order to ensure implementation of ISTE standards.
- Review curriculum documents to see that technology standards have been incorporated into core content.

	<b>2015</b>
<b>Curriculum Integration</b>	<ul style="list-style-type: none"> <li>• Revise and add to K-5 tech integration map</li> <li>• Continue to embed ISTE Standards into targeted content areas</li> <li>• 100% of the four core content areas (Math, Science, Language Arts &amp; Social Studies) have Technology integrated into at least one unit in every grade level K-5.</li> <li>• Add to and edit the Waterford Schools Weebly for student access to electronic content.</li> </ul>

## **SECTION 5 - Student Achievement**

All elementary students in grades 2-5 will learn computer keyboarding. We will continue to offer technology classes to middle and high school students. A course in computer keyboarding is offered to sixth grade students. Seventh grade students are offered a computer applications class where they use a keyboarding program, word processing, spreadsheet, and presentation software. This ensures that these students have a minimal set of computer skills to facilitate technology use across curricular areas. The eighth grade computer class is an extension of the 7<sup>th</sup> grade computer applications curriculum and will remain an elective. The high school curriculum will continue to include technology courses such as computer applications, networking, programming, website development and CADD.

We will continue to expand upon our system of data collection which is used for the purpose of gathering formative, interim and summative assessment data on students. Teachers, administrators, directors, and curriculum consultants will analyze the data to determine strengths and weaknesses in both curriculum and instruction. Instruction will be modified as needed to meet the needs of the students in order to ensure learning for all students and increase student achievement.

Improved student achievement will be accomplished as

- Teachers implement the technology integration recommendations in the K-5 *Technology Integration map*.
- Students become more proficient at computer keyboarding
- Secondary students continue to develop technology skills in technology classes and other academic classes and apply these skills in an integrated curriculum.
- Staff increases its use of ORCA (Online Resource For Curriculum and Assessment). Assessment data is collected and analyzed in order to improve programs and instruction.
- NWEA data is used to target the needs of each learner and helps to identify areas of strength and weakness in our curriculum.
- NCA-AdvancED plans and action steps reflect integration of technology standards.
- Elementary students use Dreambox for improvement in Mathematics

### **Goal/Objectives**

Incorporate proven strategies using technology into all core content curricula.

### **Action Steps**

- We will share documents with teachers outlining specific lessons and strategies for achieving technology standards for students.
- Demonstrate for teachers

### **Monitoring/Evaluation**

- We will survey teachers on ORCA regarding effectiveness of integrating strategies.
- We will administer an 8<sup>th</sup> grade assessment annually and monitor progress.

<b>2015</b>	
<b>Curriculum - Student Achievement</b>	<ul style="list-style-type: none"> <li>• Continue to write technology integration into targeted units of all core content areas, using the nine strategies from Marzano’s research (Marzano, et al., 2001)</li> <li>• Evaluate effectiveness of Dreambox</li> </ul>

## **SECTION 6 – Technology Delivery**

We plan to continue with existing online learning programs/resources which include the following:

- Teach/Learn TCI
- Turnitin
- PLATO
- NWEA-MAPS
- Compass curriculum for online learning
- Moodle
- Discovery Education Streaming
- Edmodo
- Dreambox
- MISTAR

Additionally, we plan to expand our educational opportunities for online learning, particularly focusing on increased access for secondary students. District teachers will learn to use online content to facilitate student learning in both virtual and blended learning environments. Currently, we are in the process of reviewing and evaluating existing online content.

### **Objectives/Goals-**

Promote all secondary students to have a form of an online learning experience before graduation.  
Develop best online teaching practices.

### **Action Steps**

- Identify classes that would benefit in an online learning environment
- Develop opportunities to teach and to provide WSD online courses
- Encourage access to Moodle for secondary (6-12) courses.
- Create a plan to develop common WSD online courses including: requirements, content, assessments, training.
- Train secondary staff on the implementation of Moodle in their curriculum.
- Continued promotion and expansion of the cyber academy and credit recovery programs.

### **Monitoring/Evaluation**

The online learning committee will meet at least 2 times during the year to assess progress made toward goals.

## Timeline

	2015
Curriculum - Technology Delivery	<ul style="list-style-type: none"><li>• Continue course development for online learning using Moodle</li><li>• Explore additional options for online learning/blended learning environments</li><li>• Offer professional development/workshops on online learning and online course development to teachers</li></ul>

## SECTION 7 - Parental Communications & Community Relations

MISTAR and Blackboard Connect are used as communication tools for staff, parents and students along with the district web site. The MISTAR Parent Portal provides students and parents secure access to information regarding Attendance, Schedules, Assignments, Grades and Standards, and Transcripts. Blackboard Connect is used for emergency messaging such as school closings and weather related issues, and other district events and notifications. Each school uses Blackboard Connect to send messages to parents regarding school events and activities as well as student attendance notices. The school district website ([www.waterford.k12.mi.us](http://www.waterford.k12.mi.us)) offers access to a wealth of information. This includes the district directory, calendar of events, board briefs and special announcements. Additionally, the district distributes timely information using Facebook and Twitter. Board meetings are streamed live, and YouTube is used to share special events, promoting the Waterford School District. The technology plan is stored on the Waterford School District website <http://www.waterford.k12.mi.us/ComputerServices/default.htm>.

Our technology plan committee involved a cross-section of people from our organization and from stakeholders in the community. There was representation from elementary, middle and high school levels, including teachers, building administrators, central office administrators and parents (See Appendix A).

### Objectives/Goals

- Increase community participation in existing communication technologies
- Increase social media use for communicating.

### Action Steps

- Evaluate and research new communication alternatives to consolidate access to information.
  - Assemble technology task force to research and evaluate alternatives
  - Continue to provide community education regarding communication tools.
- Increase community participation in existing communication technologies
  - Pre & Post community survey of communication tools used
  - Develop PSA's/commercial to air on 22
  - Parent information at all registrations, open houses, meet & greets, etc...

- Utilize all school newsletters, electronic media
- Utilize parent organizations to educate other parents
- Provide support and/or training to users
- Increase social media use
  - Identify barriers and challenges to using social medias
  - Research and utilize best practices from other organizations

### **Monitoring/Evaluation**

- Staff/Parent/Community Surveys. For example: A survey went out in the spring that included a section on communication. The survey asked parents and community members how they currently receive their communication from the district and how they would prefer to receive it.
- Attendance at trainings/functions or responses to information posted through technologies
- Track number of active users.

## **SECTION 8 – Collaboration**

A district reorganization resulted in the repurposing of Crary Middle School to house central administration and several departments and programs including Curriculum, Instruction and Assessment, Business Services, Special Education, Alternative Education, Continuing Education, Career and Counseling Services, Waterford Cyber Academy, and Michigan Works.

With Crary now housing the alternative high school as well as the continuing education, Waterford Cyber Academy, and Michigan Works, our resources can now be pooled to cater to the needs of this diverse population. The Crary Campus has 5 computer labs that provide computer and Internet access for the following programs that are connected to adult literacy. Wireless technology is also available in the building.

The technology contributes to the success of the following programs that are connected to adult literacy.

- Continuing Education Program
- Michigan Works for job exploration and training
- Career Preparation
- Lifetracks (a program for disabled 19-26 year olds)

### **Objectives/Goals-**

- Continuing Education teachers utilize district curriculum and assessments for the content they teach.
- Provide traditional, blended and online learning.

### **Action Steps**

- Ensure Continuing Education teachers have access to the curriculum materials on ORCA
- Ensure that the computer labs are available and utilized for online learning

- Explore additional options for online learning/blended learning environments
- Offer professional development for online learning
- Provide training on new communication tools to all users
- Develop PSA's/commercial to air on 22
- Parent information at all registrations, open houses, meet & greets, etc...

**Monitoring/Evaluation**

- Increased participation by subgroups
- Graduation rate in subgroups increase

**Timeline**

	<b>2015</b>
<b>Parent Communications, Community Relations, and Collaboration</b>	<ul style="list-style-type: none"> <li>○ Explore additional options for online learning/blended learning environments</li> <li>○ Offer professional development for online learning</li> <li>○ Provide training on new communication tools to all users</li> <li>○ Develop PSA's/commercial to air on 22</li> <li>○ Parent information at all registrations, open houses, meet &amp; greets, etc...</li> </ul>

**SECTION 9 – Professional Development**

The Waterford School District is committed to an aligned curriculum where students are assessed on Essential Learnings that are founded in State and National Core Standards. There is a strong focus on curriculum design and instruction. Professional development is provided by district consultants, learning coaches and administrators to ensure that teachers are knowledgeable in instructional practices and their curricular area.

The district will continue to use Charlotte Danielson's framework for teaching as a model for professional development. In her book, *Enhancing Professional Practice: A Framework for Teaching*, she establishes four domains that comprise a comprehensive framework about the various aspects of teaching. The domains are as follows:

- Domain 1 – Planning and Preparation
- Domain 2 – The Environment
- Domain 3 - Instruction
- Domain 4 – Professional Responsibilities
- Domain 5- Student Growth (New)

First year teachers will focus on Domain 2 (The Environment). Second and third year teachers focus on Domain 3 (Instruction) and each participates in a book study on *Classroom Instruction That Works* (Marzano, Pickering, Pollock, 2001). This book highlights nine specific research based strategies proven to increase student achievement.

Using the Danielson framework through established structures such as PLC, BLTs, Staff meetings, coaching labs, and curriculum alignment meetings, teachers learn, create, share, and discuss curriculum and instructional practices, particularly addressing domains 3 and 4.

The Curriculum, Instruction and Assessment department (CIA) includes the director, curriculum consultants and instructional coaches. The professional development plan for the 2014-15 will continue to support district priorities such as the Writing Initiative, Common Core and PLC with a focus on Learning Targets (See Figure 2). These priorities will be supported during the three Professional Development Days, half days sessions, coaching, walkthroughs, and PLCs. Use of technology for instruction will be embedded into sessions using recommendations from the NETS, which can be accessed at the International Society for Technology in Education (ISTE) website <http://cnets.iste.org>.

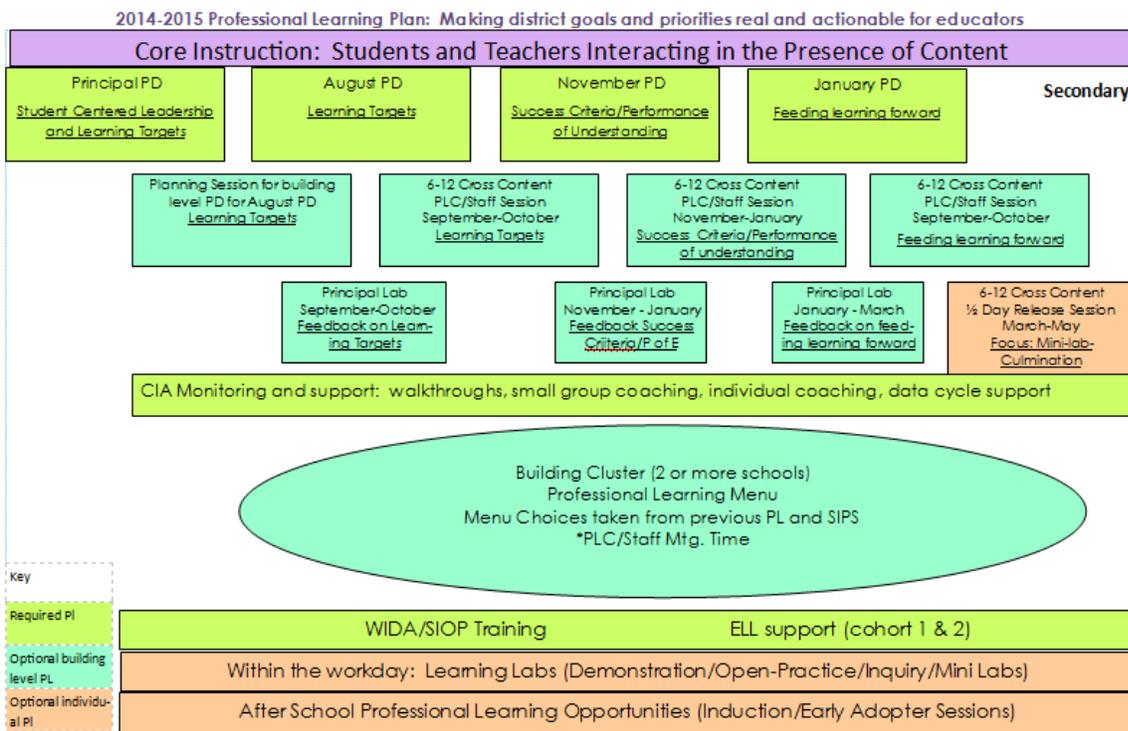


Figure 2. Proposed plan for Professional Development for Secondary teachers

### Objectives/Goals

- All teachers will use their display system for instruction
- All instructional staff will develop an awareness of their level of technology integration using the SAMR model.
- All teachers and administrators will be proficient in retrieving and analyzing data and changing their practice as a result of the data.

### Action Steps

- Enroll all teaching staff in a Moodle course regarding technology in the classroom, focused on 21 Things for Teachers.

- Offer after-school sessions to support use of the 21 Things
- Create and distribute training videos on use of new display technology to all teaching staff
- Provide on-site support for use of new display technology
- Schedule classroom visits to support use of new display technology
- Continue to develop teaching abilities in online learning environments
- Continue MISTAR support for all staff
- Communicate offerings in District Professional Development catalog

### Monitoring/Evaluation

- Survey staff and identify professional development needs in order to ensure implementation of ISTE standards.
- Provide timely reflective survey on technological professional developments opportunities to determine effectiveness, and to plan for additional training and support.
- Monitor use through classroom visits to support use of new display technology

### Timeline

	2015
<b>Professional Development</b>	<ul style="list-style-type: none"> <li>• Continue PLC work focused on data retrieval and analysis.</li> <li>• Provide access to training videos and documentation for new display technology</li> <li>• Offer after-school technology sessions using the new display technology.</li> <li>• Enroll teachers in <i>Technology in the Classroom</i> Moodle course</li> </ul>

## SECTION 10 - Supporting Resources

Over the last few years Waterford School District teachers, administrators, and support staff have worked hard to align curriculum and create common assessments. As a result of this effort we're in a position to access and analyze assessment data in powerful ways as we continue in our efforts to help students succeed. Teams of staff members have been working to provide access to these resources and to empower teachers and administrators with reporting tools for data analysis. The intentional use of the data in the reports available in ORCA and in NWEA will be a focus for next year.

### Objectives/Goals

Regularly communicate professional development opportunities, creating awareness of the various resources available.

### Action Steps:

- Communicate professional development opportunities through the Curriculum, Instruction and Assessment (CIA) department calendar of events
- Create awareness of the various resources through the *Introduction to WSD Technology* Moodle, *Technology in the Classroom* Moodle course and regularly scheduled workshops.

## Resources

- School Website
  - Technology Plan access
  - District Policies (student and staff AUP, network access agreement, Student Code of Conduct)
  - Internal network: Intranet <http://www2.waterford.k12.mi.us/>
  - SharePoint site <http://resource.waterford.k12.mi.us>
    - ORCA Curriculum Library, Report Center
    - *Technology/ORCA How To* section on the SharePoint site houses technology documentation
- Moodle Course *Introduction to WSD Technology, Technology in the Classroom* Moodle course
- SMART Notebook software and online related resources including SMART Exchange
- WSD SMART User Group and collaborative SharePoint SMART Users subsite
- Discovery Education Streaming licensing
- Articulation agreements with CTE. An articulation program involves a post-secondary institution awarding advance placement credit(s) to students enrolled in specific courses. The post-secondary institution awards credit in the following classes in which the student meets all conditions and requirements. (OCC, Baker, Ferris, Davenport, University of Northwestern Ohio)
- Tech Prep Programs. Tech Prep is a combined secondary and post secondary program culminating in a post secondary degree or technical certificate. The Tech Prep curriculum is developed by secondary and community college teachers with input from business, industry, and labor partners. Tech Prep programs utilize academic and technological knowledge to prepare students for lifelong learning and careers. Students meeting the criteria can earn college credits while saving time and money.
- Career Cruising is the software used for educational development plans/career prep.
- MOIS is used at Children's Village only.
- Oakland Schools Professional Development opportunities
- Teach TCI and Learn TCI is online Social Studies content that we use for 5<sup>th</sup> graders, American History and World Studies students at the high schools. It is funded through a federal history grant and supported by our Social Studies consultant in collaboration with history professors from Oakland University and local historical societies.
- NWEA is an adaptive online assessment tool that is aligned to the Common Core.
- Dreambox is an adaptive online math intervention targeted to students identified in the bottom 30%

## SECTION 11 – Infrastructure Needs/ Technical Specification, and Design

- **Hardware-** We have over 4,000 PCs (laptops, netbooks, desktops, tablets) in the district. We have over 130 SMART boards (projectors, response systems) in the district. And we currently have over 120 servers. Evaluate Wyse dumb terminals for online testing labs. Add 360 70-inch TVs with Apple TVs and sound systems with necessary wiring to classrooms. Provide wireless access in two high school stadiums.
- **Software-** Through relationships with Microsoft, we always have access to the latest and greatest software packages, ex. Microsoft Office 2013. We do not own the license, we lease it through the Microsoft School Agreement. Our SharePoint site currently runs SharePoint 2010, but we will

evaluate whether or not to migrate to Sharepoint 2013 and Microsoft Exchange 2013 in order to take advantage of the many enhancements. Our Student Information System will continue to be MISTAR hosting at Oakland Schools.

- **Learning Applications:** Compass Learning, Kurzweil, Plato, various reading apps, typing apps, other assorted specialty apps.
- **Network Infrastructure-** Replace the racks in the IDFs to facilitate additional equipment. Assess wireless in our buildings and add or reposition the access points. Plan for BYOD.
- **Telecommunications-** Update to VOIP phone system and Unified Communications.
- **Technical Support-** Our technology support team consists of six building techs, five core techs, one programmer, two data support personnel, one technology staff development consultant, one SharePoint consultant, one video services manager, a network manager, a secretary and a supervisor of instructional data and technology.
- **Testing** – Continue to prepared for and support NWEA Map and Smarter Balanced testing

### **Objectives/Goals**

1. Repurpose computers and computer tables from elementary building labs to increase middle school compacity from 30 to 60 plus in order to increase access for the state online assessment.
2. Implement use of VOIP phone system and Unified Communications.
3. Create online testing labs with Wyse dumb terminals at Mott High School as a proof of concept
4. Create four new 34 station lab spaces (three at Pierce and one at Kettering).
5. Add 360 70-inch TVs with Apple TVs, classroom iPads and sound systems with necessary wiring to classrooms that do not have a SMART Board.
6. Update teacher computers to handle new display technology.

### **Action Steps**

- Identify all possible funding sources
- Determine hardware specs and software applications necessary for SharePoint 2013 migration and Microsoft Exchange 2013.
- Work with Technology Solutions to implement VOIP phone system and Unified Communications.
- Install video cards with HDMI ports to support classroom displays.
- Relocate interactive whiteboards, computers, scanners and other technology related to building closures.

### **Monitoring/Evaluation**

1. A district-wide inventory spreadsheet will be created to track technology relocation and installations.
2. Create a spreadsheet to track progress on movement toward Sharepoint 2013 and Microsoft Exchange 2013 migration.

## **SECTION 12 – Increase Access**

**Elementary-** All of our elementary buildings have one computer lab equipped with 30 computers for students to access during the school day. We recently added wireless access as well as two carts with fifteen netbooks each to seven Title 1 buildings. There is at least one computer in every classroom, many of them are between four and six years old.

**Secondary-** Our secondary buildings have a range of three to four computer labs equipped with 30 computers per lab. All buildings have three or four wireless carts that hold netbooks or laptops that travel to classrooms throughout the school day.

Between Elementary and secondary buildings, we have installed 135 SMART boards, with many of them also having access to SMART response systems.

There are clubs/classes that promote the integration/access of technology in all of our schools. For example, Lego, Robotics and GPS training.

### **Objectives/Goals**

1. For the 2014-15 school year, we will increase the amount of opportunities for using technology for elementary students. (Ex. Add computer testing centers, add additional classroom computers for student computer based intervention use)
2. We will increase the amount of opportunities for using technology for middle and high school students by creating additional computer lab spaces.
3. By the 2014-15 school year, every classroom will have either a SMART board or a 70" LCD TV with an iPad and Apple TV.

### **Action Steps**

- Design an initial and future implementation plan for each building's testing centers to prepare for state online assessments
- Wire and install four new 34 station computer labs at Kettering and Pierce
- Pool funding sources to begin implementation and seek out outside sources of funding and equipment
- Support grant requests that take advantage of the expansion of wireless devices
- Publicize the district standard approved technology list
- Review all grant and technology purchase requests, using the technology plan as a filter
- Guide all technology purchase requests to fall in line with the district technology plan to move the entire district in the same direction
- Implement thin client testing lab at Mott for proof of concept

### **Monitoring/Evaluation**

- Annually monitor progress of student to computer ratio.
- Monitor progress annually to include the number of classrooms by building that have a computer less than 4 years old, a SMART Board or an LCD TV setup.

**Timeline**

	<b>2015</b>
<b>Infrastructure</b>	<ul style="list-style-type: none"> <li>• Design an initial and future implementation plan for each building’s testing centers to prepare for state online assessments</li> <li>• Wire and install four new 34 station computer labs at Kettering and Pierce</li> <li>• Pilot thin client testing lab at Mott</li> </ul>

**SECTION 13 – Budget and Timetable**

	<b>2015</b>
Salaries and benefits**	\$ 731,000
Hardware and networking costs	\$ 228,000
Maintenance and service costs	\$ 195,000
License agreements	\$ 160,000
Software and curriculum support	\$ 43,000
Professional development	\$ 81,000
Technical support	\$ 160,000
Bond Issue- Technology & Infrastructure	\$1,200,000.00

\*\* USAC E-Rate Item 25 D

## SECTION 14 - Coordination of Resources

The district has applied for and received funds from State and Federal sources. The Federally funded Erate program program has allowed the district to receive reimbursement on a variety of technology related projects. The Erate program identifies priority 1 and 2 projects that are allowed for a reimbursement percentage that is tied to the district's economically disadvantaged percentage. In the last six years, we have worked with a consultant to ensure that we pursue allowable projects and fulfill all of the paperwork deadlines and requirements. In these years, we have requested reimbursement for local and long distance telephone services, cell phone services, internet access, web hosting and most recently, 1 Gig data links to all of our secondary buildings. The chart below shows how we have offset our general fund costs by applying for projects that are subject to a refund through this program.

<b>Fiscal Year</b>	<b>Amount Requested</b>	<b>Total Disbursed</b>	<b>% of Requested Amount</b>
2006	\$152,942.46	\$74,085.42	57%
2007	\$161,046.52	\$125,771.94	79%
2008	\$163,902.88	\$147,639.58	90%
2009	\$178,025.89	\$159,616.12	90%
2010	\$180,658.75	\$171,276.14	95%
2011	\$270,388.42	\$265,659.85	98%
2012	\$303,488.11	\$254,958.72	98%
2013	\$531,202.23	\$522,798.80	Most like 98% but not complete yet.
2014	\$738,778.57	\$738,778.57	100%

The district has committed general fund monies to continue to expand Staff Development and technology resources to maintain and expand the district's commitment to use and integrate technology.

## SECTION 15 – Monitoring and Evaluation

An evaluation team consisting of the Technology Planning Team members, Staff Development Consultants, administrators, and representatives of the Computer Services Department will review the progress made toward the goals of the district technology plan on an annual basis. The team members will measure the progress and effectiveness of the implementation for the plan and its impact on students, staff and community. Following the evaluation time line, each component will be reviewed and next steps determined. Should we not make the expected progress, we will re-assess the legitimacy of the goal, adjust action steps accordingly and develop strategies for improvement.

The components of the Technology Plan will be evaluated addressing the questions:

**What are the indicators of success?**

**What will we do if adequate progress on the goal is not met?**

**What strategies can be implemented to address areas needing improvement?**

This matrix will be used to track the annual monitoring and evaluation process. The matrix includes evaluation timeframe, person(s) responsible, indicators of success and strategies for improvement.

Technology Plan Components	Evaluation timeframe	Person(s) Responsible	Indicators of Success	Strategies for Improvement
<b>Curriculum Integration</b>	April	<ul style="list-style-type: none"> <li>• Technology implementation team</li> <li>• Staff Development team</li> </ul>	<ul style="list-style-type: none"> <li>• Used survey results to Identify professional development needs</li> <li>• Technology standards have been incorporated into core content.</li> <li>• Recommendations for each subject area and grade level in the Curriculum Integration Map are embedded into the correlating curriculum.</li> <li>• Identified effectiveness of integrating strategies based on survey results</li> </ul>	
	ongoing			
	June			
<b>Parent Communications, Community Relations, and Collaboration</b>	ongoing	Technology implementation team	<ul style="list-style-type: none"> <li>• Technology was used to communicate events to the community</li> <li>• Data collected shows the number of active users of technologies such as social medias</li> <li>• Number of students who participated in online or blended learning increased</li> </ul>	
	June			
<b>Professional Development</b>	ongoing	<ul style="list-style-type: none"> <li>• Technology implementation</li> </ul>	<ul style="list-style-type: none"> <li>• Data on technological professional development</li> </ul>	

Technology Plan Components	Evaluation timeframe	Person(s) Responsible	Indicators of Success	Strategies for Improvement
		team/Staff Development team	opportunities is used to plan for additional training and support.	
<b>Infrastructure</b>	September February May	<ul style="list-style-type: none"> <li>• Technology implementation team</li> <li>• Representatives of the Computer Services Department</li> </ul>	<ul style="list-style-type: none"> <li>• District wide spreadsheet is used to track the age of computers, their location and replacement schedule.</li> <li>• Inventory spreadsheet includes the number of classrooms by building that have a computer less than 4 years old, a new LCD TV set up or SMART Board.</li> </ul>	

## SECTION 16 – Acceptable Use Policy

All students and employees of the Waterford School District have individual network IDs. Prior to logging on to a district computer, the following message is displayed on the screen: *“Do not attempt to log on unless you are an authorized user. All programs, files, and activity on this machine are subject to being monitored. Student Code of Conduct and Acceptable Use Policy (AUP) will be enforced.”* Users click OK to proceed. Sophos Endpoint Security and Control is in place for filtering once logged on.

The Waterford School District’s *Acceptable Use Policy* is shown below.

### **TECHNOLOGY/INTERNET ACCEPTABLE USE**

All students and Waterford School District employees or representatives with a network ID issued through the Waterford School Network Connection must comply with the Acceptable Use Policy. The intent of this policy is to make clear certain uses that are consistent with the purpose of the Waterford Schools Network Connection, not to exhaustively enumerate all such possible uses.

Internet access is available to students and staff in the Waterford School District. Our goal in providing this service to students and staff is to promote educational excellence in schools by facilitating resource sharing, innovation, and communication.

With the access to computers and people all over the world also comes the availability of material that may not be considered to be of educational value in the context of the school setting. On a global network it is impossible to control or restrict all controversial materials. The Waterford School District firmly believes that the valuable information and interaction available on the worldwide network far outweighs the possibility that users may procure material that is not consistent with the educational goals of the District.

#### **User Rights**

Each user has the conditional right to make use of approved hardware and software found on District property in order to promote personal academic growth.

Users have the conditional right to access the Internet for personal academic growth, information gathering, and communication, as long as they do so in a manner consistent with the responsibilities listed below.

#### **Responsibilities**

- A. Users exercising the right to use any hardware or software as an educational resource shall also accept the responsibility for the preservation and care of that hardware and/or software.
- B. Users accessing the Internet as an educational resource shall accept the responsibility for the appropriate use of all material received under his/her user account.
- C. Users will be held accountable for any deliberate attempts at allowing and/or running a computer virus on District equipment.
- D. It is the user’s responsibility to maintain the integrity of electronic mail systems. Users are responsible for reporting all violations of privacy. All students and staff are prohibited from: sending e-mail which contains pornographic material, inappropriate text files, or files dangerous to the integrity of the network; use of the network to access pornographic material; use of the network for commercial or for-profit purposes, or fund-raising without District approval. A student is responsible for reporting, to a teacher or administrator, e-mail received by him/her which contains inappropriate information or text files.
- E. All users must receive permission to install software applications or download files on School District equipment. Students will not remove, relocate, or modify any hardware, software or files, or enter the system folder or control panel.
- F. Unauthorized altering of another user’s files or password is prohibited. Sharing network identifications (ID) for the purpose of allowing others access to the network is not allowed. All violations of this policy that can be traced to a network ID will be treated as the responsibility of the owner of that ID.
- G. The users shall not intentionally use programs that harass others or infiltrate a computer or computing system and/or damage or alter the software components of a computer or computing system.

## **TECHNOLOGY/INTERNET ACCEPTABLE USE (Page 2)**

- H. Use of technology to cause a disturbance, intimidate, slander, harass, or threaten another person is prohibited.
- I. Use of technology (e.g. PDAs, laptops, cell phones) to transfer or view inappropriate files or data is prohibited.
- J. Use of the Network for recreational games and gambling is prohibited.
- K. Users will adhere to copyright and license rules and laws.
- L. Users are responsible for making sure that subscriptions (i.e., newsgroups, listservs) they request are appropriate.

### **Waterford School District Rights**

The Waterford School District has the right to review any material stored in files to which users have access, to edit or remove any material which the District, in its sole discretion, believes is unlawful, obscene, abusive or objectionable, and to take appropriate legal action.

The Waterford School District makes no warranties of any kind, whether expressed or implied, for the service it is providing. The District will not be responsible for loss of data, service interruptions, or for the accuracy or quality of information obtained through Internet services.

### **Disciplinary Action**

Waterford Schools reserves the right to monitor employee and student use of the Waterford Schools Network Connection. When inappropriate use is discovered, one (1) or all of the following actions may be taken:

- A. The user who inappropriately uses the Waterford Schools Network Connection will be requested to end the practice.
- B. The user's Waterford Schools Network Connection privileges will be terminated.
- C. Additional disciplinary action in accordance with existing policy (e.g. Student Code of Conduct, section GBCB on Staff Conduct in District Policy Book) and procedures may be taken.

The District and/or Network does not warrant that the functions of the system will meet any specific requirements the user may have, or that it will be error free or uninterrupted; nor shall it be liable for any direct or indirect, incidental, or consequential damages (including lost data, information, or time) sustained or incurred in connection with the use, operation, or inability to use the system.

The District and/or Network will periodically make determinations on whether specific uses of the Network are consistent with the acceptable-use practice. The District and/or Network reserves the right to log Internet use and to monitor electronic mail space utilization by users.

The user may transfer files from information services and electronic bulletin board services. For each file received through a file transfer, the user agrees to check the file with a virus- detection program before opening the file for use. Should the user transfer a file, shareware, or software which infects the Network with a virus and causes damage, the user will be liable for any and all repair costs to make the Network once again fully operational and may be subject to disciplinary action.

The user may not transfer file, shareware, or software from information services and electronic bulletin boards without the permission of the Superintendent/Director of Management Information Services. The user will be liable to pay the cost or fee of any file, shareware, or software transferred, whether intentional or accidental, without such permission.

The District reserves the right to log computer use and to monitor fileserver space utilization by users. The District reserves the right to remove a user account on the Network to prevent further unauthorized activity.

The user is responsible for the proper use of the equipment and will be held accountable for any damage to or replacement of equipment caused by abusive use.

<http://www.neola.com/wfps-mi/search/policies/po7540.03.htm>

An overall summary of the broad goals addressed in this plan will be completed for each year of the plan. The evaluation team will identify the extent to which the goals were met and determine adjustments needed for the next year of the plan.

Goal	Goal Met (yes/no) or %	Unexpected outcomes	Next steps
The <i>ISTE Standards for Students</i> will be integrated into core curriculum courses.			
All staff will participate in ongoing professional development that supports teaching and learning with technology.			
Increase access to technology for all students, staff and members of the community.			

## Appendix A

### Technology Planning Committee

Name	Role
Beasley, Dianna	Special Education Teacher
Cargo, Don	WSD Resident and Consultant
Daugherty, Tom	Network Manager
Dixon, Yvonne	Secondary Principal
Grambush, Suzanne	Elementary Principal
Holley, Darin	Director of Instructional Data & Technology
Jacques, Mary	Cyber Academy Dean
Jasina, Toni	WSD Resident
Krompatic, Dan	Secondary Teacher
Kutchey, Elizabeth	Elementary Teacher
Lee, Monica	Director of K-12
Lessel, Rhonda L	Director of Community Relations
McCartan, Janice	Elementary Principal
Mcfee, Lisa	Assistant Superintendent of Teaching & Learning
Morrissey, Tricia	Secondary Teacher
O'Driscoll, Kathy	Technology Staff Development
Reyburn, Tracy	Elementary Teacher
Smitka, Steve	Secondary Teacher
Tekiele, Jane	Manager of Video Services
Vanderelzen, Ian	Head Network Technician