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District Technology Plan

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Calhoun Intermediate School District

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SECTION 2 - INTRODUCTORY MATERIAL

EXECUTIVE SUMMARY

Since we live in a global information age, technology literacy is foundational to prepare students for a future where almost all information will be in electronic form. In order to be successful, technology literacy must be second nature for all students. We, as educators at Battle Creek Public Schools, face important challenges to use available resources to enhance and to expand the teaching and learning process.

Since every school district bordering Battle Creek has passed a bond issue including upgraded technology, our students were at a disadvantage in an ever-changing and competitive world. In May 2007, Battle Creek Public Schools was successful in passing a bond issue for expansion and renovation of Battle Creek Central High School and Valley View Elementary School. As part of this process, the district conducted visioning to determine the ideal technology-rich learning environment for classrooms at both the elementary and the high school levels. Teachers, consultants, and administrators visited school districts as far away as Colorado and Virginia gathering information, pictures, videos, and examples of exemplary environments, including technology tools and infrastructure that enhanced instruction. During 2009, visioning occurred with the goal of determining the ideal environment in Middle School classrooms. Battle Creek Public Schools has developed this three-year Technology Plan with the elements of this vision.

ORGANIZATION

The State of Michigan requires that certain components be included in this plan to increase emphasis on instructional technology. Teachers, administrators, paraprofessionals and parents representing the district, conducted a thorough review of the existing technology plan. The goal was to create an instructional technology plan, which focused on the learning needs of students, the professional development needs of teachers, and the establishment of technology-rich environments for instruction.

The required emphasis is on technology integration, professional development, student achievement, and access to technology. The Technology Department made revisions in the infrastructure portions of this plan to coincide with updates from previous year's plans.

Technology does not drive Battle Creek Public Schools' curriculum; rather, technology derives its direction from the curriculum. Before adopting any new technologies, the district evaluates them in light of how they will best serve the needs of all stakeholders and by an evaluation from teachers in the classrooms in various settings. The Battle Creek Public Schools' Educational Plan provides a focus for all our technology initiatives.

DISTRICT MISSION STATEMENT

Battle Creek Public Schools - A world-class system providing a quality education that prepares all students to be productive and responsible citizens.

DISTRICT BACKGROUND

Battle Creek Public Schools is an urban school district located in Calhoun County, Michigan. It serves a major portion of the City of Battle Creek, portions of Emmett Township, Pennfield Township, Bedford Township, and the City of Springfield. The district includes one high school,

three middle schools and nine elementary schools. There are six sites in the district for early childhood education in addition to two alternative education 9-12 schools, a Michigan Youth Challenge Academy and an adult education program (Appendix A).

STUDENT ENROLLMENT AND DISTRICT DEMOGRAPHICS

The 2010-2011 K-12 student enrollment is 5823, showing a declining trend in student enrollment at our school district as the 2009-2010 K-12 student enrollment was 6304.

Presently, there are approximately 403 teachers with a teacher-to-student ratio of 16:1 and more than 461 support staff including 45 administrators. All of the district's elementary and middle school buildings are Title I identified schools, while the total number of students qualifying for free or reduced priced meal assistance through the National School Lunch Program (NSLP) is 70.74%

According to the 2000 census profiles for Battle Creek, Michigan, the total population consists of 47.9% males and 52.1% females with a median age of 34.7 years. The cost of living is low with a median household income of \$35,491.00 and average household size of 2.43; the number of high school graduates or higher is 82.4%. With a diverse population, the percent of the total population of 53,364 includes the following demographics: 74.7% Caucasian, 17.8% African-American, 1.9% Asian, 4.6% Hispanic, 0.8% Native-American, and 2.7% Multi-Ethnic.

TECHNOLOGY PLANNING COMMITTEE

Battle Creek Public Schools' Technology Planning Committee is comprised of stakeholders from administration, teachers, parents, and the community who are committed to planning for and implementing technologies that prepare our students for 21st Century learning. The selection of the Technology Planning Committee members is based on their willingness to volunteer their expertise and knowledge of school policies, procedures, and educational technologies required to meet challenging academic standards for all our students. The role of the Technology Planning Committee is to develop, implement, and evaluate this technology plan on at least an annual basis. Meetings will be held to determine the efficiency and effectiveness of reaching the goals and the strategies for our technology initiatives (Appendix B).

SECTION 3 – VISION AND GOALS

DISTRICT VISION STATEMENT

Battle Creek Public Schools will ensure a quality education for all students through quality teaching and support from all staff.

DISTRICT GOAL STATEMENTS

1. Battle Creek Public Schools will improve student achievement as measured by specific district targets for English language arts and mathematics, with each area increasing by a minimum of 3% per year.
2. Battle Creek Public Schools will continue to close the achievement gap between Caucasian and African-American and between Caucasian and Hispanic students by a minimum of 3% per year in the areas of mathematics and literacy.
3. Battle Creek Public Schools will increase the success of our high school students by increasing the graduation rate 3% annually and decreasing the dropout rate .5 each year.
4. Battle Creek Public Schools will implement building mergers, renovations, new construction, and maintenance programs to provide supportive environments designed to specifically enhance teaching and learning.

INSTRUCTIONAL TECHNOLOGY VISION

It is the vision of the Battle Creek Public Schools that all students will have access to technology, both at school and in the community, to enhance their learning opportunities. Furthermore, that all staff will be trained and have the access, skills, and opportunity to maximize the use of technology to improve student achievement.

INSTRUCTIONAL TECHNOLOGY MISSION

Our Mission is to provide a quality education for ALL students in a safe and healthy environment.

INSTRUCTIONAL TECHNOLOGY GOALS

In order to achieve our goals, Battle Creek Public Schools plans to utilize new and existing technology such as the future additions of more Voice Over Internet Protocol (VOIP) telephones in classrooms, continual upgrading of computer labs, wireless hot spots, web portal communication tools, 802.11n and s, video distribution, wireless slates, interactive whiteboards, student response systems, online course management systems, online data collection and warehousing, online testing, and yet to be developed new technologies which will enhance educational opportunities. These strategies will increase opportunities for teachers to share resources easily and to discover new ideas for technology integration across the curriculum. The District also utilizes a variety of productivity software such as Microsoft Office and curriculum specific software such as Study Island, Plato, NovaNet, and Aventa Learning that enhances teaching and student learning. These technologies, along with ongoing professional development, will help Battle Creek Public Schools achieve the following instructional technology goals:

1. To maintain a leadership position in instructional technology and learning with technology tools in collaboration with consortium districts for professional development.
2. To develop teachers through focused professional development as individual school

technology leaders who can support technology-rich lessons and units of instruction that will improve student learning and academic achievement.

3. To embed technology into all subject areas through focused professional development programs and activities with the curriculum coordinator.
4. To provide technologically-enhanced learning experiences for students that will develop higher-order thinking and technological literacy skills.
5. To provide individualized instruction in, and anytime/anywhere access to, technology resources for all district stakeholders.
6. To improve communication among teachers, students, parents, administration, and support staff with technology.
7. To maximize the use of the data warehouse, [Achieve Data Director](#), when obtaining student achievement information and when making sound instructional decisions.

CURRICULUM

SECTION 4 – CURRICULUM INTEGRATION

Goals and strategies, aligned with challenging State standards, for using telecommunications and technology to improve teaching and learning.

Battle Creek Public Schools has a documented history of successful policy and curriculum development. The state and national goals and performance indicators drive the district's curriculum design for using technology to improve teaching and learning. As a valuable resource for teachers, our technology integration across the curriculum was created from the most recent research on learning in technology along with the [Michigan Educational Technology Standards \(METS\)](#), the [Michigan Educational Technology Plan](#), the [International Society for Technology in Education \(ISTE\)](#) standard, and “best practices” outlined in research based teaching programs (Appendix C). The district will also use the 21 Things for Teachers resources to improve its teachers technology integration capabilities. The purpose of this resource is to provide “Just in Time” training through an online interface for K-12 educators based on the [National Educational Technology Standards \(NETS\)](#) for teachers. These standards are the basic technology skills every educator should possess. In the process, educators will develop their own skills and discover what students need in order to meet the NETS for Students, as well as the Michigan Merit Curriculum (MMC) Online Experience requirement. Participants who fulfill all of the requirements have the opportunity to earn State Board - Continuing Education Unit (SB-CEU)'s or college credit.

Instructional Technology Goals

1. To become a leader in instructional technology and to learn with technology tools in collaboration with consortium districts for professional development.
2. To develop teachers through focused professional development as individual school technology leaders who can support technology-rich lessons and units of instruction that will improve student learning and academic achievement.
3. To embed technology into all subject areas through focused professional development programs and activities with the curriculum coordinator.
4. To provide technologically enhanced learning experiences for students that develop higher-order thinking and technological literacy skills.
5. To provide individualized instruction in, and anytime/anywhere access to, technology resources for all district stakeholders.
6. To improve communication among teachers, students, parents, administration, and support staff with technology.
7. To maximize the data warehouse, [Achieve Data Director](#), when obtaining student achievement information and when making sound instructional decisions.

Instructional Technology Strategies

- All teachers at Battle Creek Public Schools will receive PD in 21 things.

- Battle Creek Public Schools' focus is on increasing access¹ to technology for all staff and students.
- All teachers have laptops issued to them for year-round use to assist them in instruction and in their own professional development.
- Survey staff to determine further professional development needs.

Instructional Technology Action Steps

- Battle Creek Public Schools has developed [in-district content](#) for technology integration distributed via [internal web sites](#).
- Battle Creek Public Schools subscribes to [Atomic Learning](#) for technology skills development.
- Technology PD will be offered throughout the school year covering:
 - 21 Things for Teachers
 - DataDirector
 - Moodle
 - Data for student success (Data4ss)
 - ISD courses

Progress toward Instructional Technology Goals

Elementary - During the past several years, Battle Creek Public Schools has gone from a beginning technology program for enrichment using social studies and technology to a well-developed technology/media literacy program with a solid professional development component for teachers. The [METS](#) and [NETS](#) standards and profiles, developed by the ISTE, provide another framework for developing curriculum and classroom activities that integrate technology. The Michigan K-12 technology benchmarks provide a blueprint of basic technology skills needed for students to be successful citizens and to be productive workers in the 21st Century. At Battle Creek Public Schools, the first step was to address deficiencies in the curriculum so that technology instruction more successfully prepares students according to the METS Standards for grades K-2 and 3-5 (www.techplan.org).

Middle School - As a whole, we will continually review technology basic skills and understandings as identified by student performance on the Eighth Grade Technology Literacy Test and raise their level of competency as needed. In addition, developing technology integration strategies for all middle school teachers will help support student literacy in technology by encouraging technology integration across the curriculum. The [METS](#) and [NETS](#) standards and profiles, developed by the ISTE, provide another framework for developing curriculum and classroom activities that integrate technology.

High School – Battle Creek Public Schools will continue working on ways to promote and to support technology integration for all of our teachers to use within their curricula area. In addition to technology integration in the classrooms, our high school students have access to technology-rich courses within the framework of our Fine Arts Academy. These students also have access to business courses and to more advanced technology courses at the Calhoun Career Center and at the Battle Creek Area Math and Science Center.

SECTION 5 - STUDENT ACHIEVEMENT

¹ Access: Computers will enhance learning only when students have easy access to them in their classroom. Using computers once or twice a week will have negligible impact on student learning. [Investing in Technology: The Payoff in Student Learning ERIC Digest](#)

Strategies that are based on research and that integrate technology into curricula and instruction, for purposes of improving student academic achievement and a timeline for this integration.

Battle Creek Public Schools has integrated technology standards into its curricula and instructional programs and practices that ensure that all students will become successful, contributing citizens in a global society. The primary objective of Battle Creek Public Schools, during the course of this plan, is to have a curriculum map that outlines the scope and the sequence for all grades and that aligns the curricula to the K-12 METS. (Appendix D)

Technology Curriculum

The Battle Creek Public Schools Technology Curriculum focuses on technology education and on technology literacy. Technology education is the study of technology and its effects on individuals, society, and civilization. Technology literacy is the ability to use, to manage and to understand technology. The goal of the Technology Curriculum is to assist each student in becoming a technology literate member of society, capable of choosing and using the appropriate technology to support their needs. Concerning the K-12 educational needs, students should be able to choose the appropriate technology to support their own learning in all core content areas.

Technology Curriculum Status

The METS technology scope and sequence has individual grade level assessments with required proficiency levels expected to be mastered as students exit each grade level. Regardless of grade level, all students are required to learn about keyboarding, word processing, spreadsheets, databases, desktop publishing, multimedia, and telecommunications; while teaching staff needs to be aware of the various Michigan Standards and Benchmarks that apply to technology as they relate to the individual curriculum strands. Accordingly, Battle Creek Public Schools is committed to promoting curricula and teaching strategies by making technology available to all stakeholders, training staff, and students on when, why, and how to effectively use technology for enhancing teaching and learning. Presently, Battle Creek Public Schools' Technology Curriculum is aligned with both state and national standards (Appendix E).

K-12 Technology Benchmarks

Technology at Battle Creek Public Schools does not drive the curriculum; rather, technology is given its own direction from the curriculum. All technologies adopted by the district are examined in light of how they will best serve the needs for our students to master necessary learning skills. In order to accomplish these learning objectives for our students, the district adheres to a comprehensive technology curriculum revision schedule (Appendix F)

The mission of the Battle Creek Public Schools is to provide a quality education that prepares all students to be productive and responsible citizens. A quality education is dependent on the support of a quality curriculum. As such, with local input the district developed curricula using standards set forth by the Michigan Department of Education.

Technology is a tool that can enhance the quality and the method of delivering instruction to our students and can accelerate student learning. Technology encourages students to develop higher-order thinking skills and exposes students to technologies that are common in the workplace.

Additionally, use of technology can improve communication between parents, teachers, administrators, and students, which will provide the support needed for our students' increased

academic achievement. The methods set forth by the Michigan Department of Education Technology Curriculum Resources, the Grade Level Content Expectations Technology in the METS and the NETS standards and profiles are used by the Battle Creek Public Schools as important guides for developing our curriculum (Appendix E).

Technology Curriculum Content Examples

At Battle Creek Public Schools, a technology-rich environment provides students with the opportunities to develop skills aligned with the Technology Foundation Standards outlined in the [ISTE/NETS](#). These technology literacy skills, to support learning and personal productivity, include the following:

- the ability to be capable technology users
- the ability to use technology to facilitate inquiry and research
- the ability to use technology to analyze and evaluate information
- the ability use technology to solve problems
- the ability to use technology to communicate and publish understanding
- the ability to use technology for construction and expression of understanding

Technology Integration Timeline

2011-2012

- Continue Curriculum revision per schedule.
- Convene Technology Planning group quarterly to evaluate progress with Instructional Technology goals.
- Increase PD opportunities for all teachers to share effective lesson ideas
- Identify school technology leaders' needs for growth and plan for these opportunities.
- Increase collaborative efforts to host Technology PD with ISD personnel
- Identify and address patterns in 8th grade technology literacy.
- Document Integration lessons and units in K-5, and One-to-One programs, and make them part of online knowledge-base on district's intranet.
- Develop Middle School lessons and units that model integration and make them part of online knowledge base on district's intranet.
- Technology Planning group: Continue evaluation and adjust for success with Instructional Technology goals.
- Incorporate 21 things for staff and students.

2012-2013

- Continue Curriculum revision per schedule.
- Technology Planning group: Continue evaluation and plan for new Technology Plan for the 2013-2014 cycle.
- Increase PD opportunities for all teachers to share effective lesson ideas
- Increase collaborative efforts in Technology PD among consortium districts
- Increase PD opportunities for all teachers to share effective lesson ideas
- Identify school technology leaders' needs for growth and plan for these opportunities

2013-2014

- Continue Curriculum revision per schedule

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SECTION 6 - TECHNOLOGY DELIVERY

Strategies for the delivery of specialized or rigorous courses and curricula through the use of technology, including distance-learning technologies.

Overview

The 21st century promises more online content sites that will provide rich educational environments that students can use at school and at home. With the infusion of classroom technology, Battle Creek Public Schools' teachers are transitioning from learning teacher-focused technology use to a more dynamic student-focused environment where children engage in learning activities to enhance their technology skills as well as their academic progress. Our ability to utilize and to create online content is improving as our skill level and hardware access increases. Battle Creek Public Schools will continue employing alternative methods of instructional delivery, including distance learning, using various technologies, when/ if available, including, but not limited to the following specialized learning opportunities:

- **One to One Computers** – Student groups, at the same grade level, are selected by participation in an application process that includes the requirement that all teachers in the team that teaches the group of students participate in technology and technology integration professional development. Participating students pick up their assigned computer at the beginning of the day, use it in their classes as required by the lesson plan, and return them at the end of the day. Students may also, with the approval of the teacher, be permitted to take their computer home to use for school work.
- **Website** – The district's website provides the community with information on the district in general. Several schools have their own web pages that provide school specific information including special building activities, calendars, news and events, web-links to other sites, and a student/parent portal.
- **Internet Access** - Provided to both staff and students
- **Online Higher Education Courses** - Students have opportunities through Michigan Virtual High School (MVHS) and Michigan Virtual University (MIVU) to earn graduation credits. In addition, Battle Creek Central High School has certification with Kellogg Community College (KCC) for accounting, business and marketing technology classes for students to earn college credits.
- **Multi-Media Courses** – Technology-based high school courses that include video animation, programming and film production technologies.
- **Internet Research Tools** – These online learning experiences are required for high school students.
- **Parent/Student Portal** – Parents and students have secure access to a web portal through our student information system, Zangle. Provided through a secure connection to the Wayne County RESA, this portal allows parents and students access to information about homework assignments, grades, lunch menus, calendars, etc.
- **Student Email** – Gaggles.net, whose focus is, and always has been, on student safety has been providing safe online learning tools for the K-12 market since 1998. This system allows learners to take advantage of current technological tools for communication, collaboration, and productivity. All 4-12 grade students are assigned safe email accounts through a subscription to Gaggles.net.
- **Discovery Education** - Discovery Education streaming integrates seamlessly into any curriculum with 5,000 full-length videos segmented into 41,000 content-specific clips

tied directly to state and national standards. Educators also recognize it as a valuable resource for today's classroom by providing dynamic teaching and learning opportunities with technology.

- **Atomic Learning** - Atomic Learning is a web-based application focused on promoting the practical application of technology in education by empowering educators with the training and the resources needed to create 21st century-ready students.
- **Nova Net** – This courseware is the most complete, research-based, flexible, and engaging online courseware for high school and adult learners and has a web-based platform and curricula that meets state and national standards. The rigorous courses and interactive framework promotes objective-based mastery helping learners reach academic success at their own pace. Specifically, Nova Net courseware is used at the high school for credit recovery.
- **Aventa Learning** - This courseware is provided by Florida Virtual as an online, self-paced learning environment with a web-based platform and curricula that meets state and national standards.
- **Moodle** - Moodle is a Course Management System (CMS), also known as a Learning Management System (LMS) or a Virtual Learning Environment (VLE). It is a free web application that educators can use to create effective online learning sites. Presently, teachers use Moodle to create classroom web pages as well as mixed online/face-to-face digital course resources.
- **Plato** – This software provides prescriptive, personalized instruction, technology-based teaching tools, standards-driven assessments, and data management to facilitate continuous academic improvement for K–adult learners. Specifically, the Plato software application is used for remediation at the middle schools and enrichment for Advanced and Accelerated students in grades 3-8.
- **Assistive Technologies** – As a commitment to providing appropriate and effectual technology for all of our students, the district has data projectors, sound systems, digital cameras, voice activated software, specialized input devices, and other systems for use by students with special needs.

Future Technology Delivery Needs

Battle Creek Public Schools is researching additional resources to expand our offerings, to develop a virtual library for all students, and to increase the use of our website with more interactive features.

SECTION 7 - PARENTAL COMMUNICATIONS AND COMMUNITY RELATIONS

Strategies to promote parental involvement and to increase communication with parents and community, including a description of how parents and community will be informed of the technology to be used with students.

Technology Plan Dissemination

Battle Creek Public Schools will make the District Technology Plan available to the community. The "Latest News" on our website will feature a summary of the plan after presentation to the Board of Education. Administrative staff will e-mail and communicate a summary of the Technology Plan to building staff. A printed copy of the Technology Plan is available at the central administration building upon request, posted on our district website at http://www.battlecreekpublicschools.org/Portals/0/docs/Technology/Tech_Plan.pdf , and is also accessible from a link on the [Moodle Teacher Resource Page](#)

District Communication

Battle Creek Public Schools actively encourages community involvement with our existing and our future technology planning initiatives, wherever possible. Parents, grandparents and interested members of the community have served on technology planning committees related to the visioning for new facilities. The Technology Planning Committee will continue to coordinate with community programs and volunteers to enhance our collaborative efforts throughout the area. Battle Creek Public Schools' recently renovated web presence has new wireframe and content management, which allows greater communication between our community and our schools. The district also acquired a School Messenger dialer/email system for emergency response to students, parents and community while all school principals and administrators have access to parent/student contact information via a link to Zangle.

Battle Creek Public Schools has an ongoing partnership with the Battle Creek Enquirer, our local newspaper from Gannett, who promotes our schools with feature articles and news events. Battle Creek Public Schools also publishes its own paper titled *News and Views* to distribute as a supplement in the local newspaper and to non-subscribers in an Express section.

SECTION 8 - COLLABORATION

Strategies for developing the program, where applicable, with adult literacy providers.

Adult Literacy Programs

Battle Creek Public Schools has made progress in making technology more accessible in our community and our schools. The district plans to continue our dialog with community groups, such as [One Economy](#), the United Community Ministerial Alliance and [Neighborhoods, Inc.](#) to identify additional areas where we are able to provide collaborative solutions for our community. Presently, parents use all computers placed at the community sites for GED classes while online course content is used to support adult literacy initiatives.

General Education Development (GED)

Battle Creek Public Schools provides GED preparation courses for adults, post high school students and young adults with a primary component of computer-aided, self-paced instruction. Students who have stopped attending school have the option of attending a program for completion of a diploma or attending the GED preparation courses.

In addition to the GED course offerings, Nova-Net online courses at South Hill Academy are used for credit recovery, for general education, and for expelled students. At the high school, Nova-Net is used for credit recovery and to offer more opportunities than extended day classes.

Collaborative Efforts

Support for our community initiatives includes donations from Kellogg, Kellogg Community College, State Farm, the Social Security Administration and the Veteran's Administration. This support for technology has increased the district's student-to-computer ratio. The district will continue to cultivate these relationships within the community to serve the long-term needs of our students. In addition to collaboration with these community groups, Battle Creek Public Schools recognizes that collaboration with other school districts and with educational organizations can only enhance and improve its technology programs. The district actively seeks cooperative ventures with outside organizations that can assist with reaching set goals. Accordingly, in the pursuit of its technology programs we have established working relationships with the following education organizations:

- CALHOUN ISD - Intermediate School District program for school management
- Battle Creek Area Educator's Task Force
- TLC – Technology Leadership Committee
- MDE – Michigan Department of Education;
- Middle Cities (Michigan School Districts Association);
- Michigan State University and Project Time-Technology Innovation Challenge Grant.
- Battle Creek Area Staff Development Team
- Western Michigan University
- Kellogg Community College
- Miller College
- Michigan State University
- Battle Creek Parks and Recreation
- WK Kellogg Foundation
- One Economy
- Neighborhoods, Inc.
- United Community Ministerial Alliance
- Battle Creek Diversity

- Urban League
- Southwest Michigan Alliance of Black School Educators

PROFESSIONAL DEVELOPMENT

SECTION 9 - PROFESSIONAL DEVELOPMENT

Strategies for providing ongoing, sustained professional development for teachers, principals, administrators, and school library media personnel to ensure that staff know how to use the new technologies to improve education or library services.

Professional Development Strategies

Battle Creek Public Schools' professional development strategies are focused on integration of technologies into all curricular areas. The district utilizes NETS (Appendix E) to determine the professional development activities necessary for teachers' seamless application of technology to learning in all grades K-12. The district also uses survey and evaluation to determine which professional development activities and workshops will best serve the needs of our administrators, teachers, students, and other staff.

One of Battle Creek Public Schools professional development information gathering tools is Zoomerang online survey software. This software allows us to build a survey, then analyze and share the results by [creating customized charts](#) and by [posting them to our website](#), or by exporting the data to Excel, PowerPoint, or a PDF. With various stakeholders in mind, the district uses surveys to gather information and to gain a better understanding of respondent skill levels, needs, and interests. These surveys also allow the district to evaluate teachers' experiences in professional development sessions and their ability to use what they have learned. In addition to on-going professional development sessions, follow-up sessions are available for one-on-one by technology staff, as needed, at their work site.

Professional Development Matrix

The following matrix displays our understanding of learner levels on a continuum. Battle Creek Public Schools currently offers PD in levels 1, 2, 3 and 4. The realization of all levels of this matrix in the future will involve additional school-university partnerships.

LEVEL 1 Introduction	All users	Introduction to technology, software application basic skills. Just in time approach, not sustained learning.	No PD
LEVEL 2 Developing	Most users	Technology Integration basics. Classroom use of software, hardware. Ties to classroom content. Sustained.	PD, SBCEU
LEVEL 3 Mastery	Many users	Sustained Classes in Technology Integration and classroom use of software, hardware (4-8 weeks in duration) to facilitate development.	PD, SBCEU
LEVEL 4 Application	Some users	Sustained classes in Technology Integration, and classroom use of software, hardware (18 weeks) that develops and applies units for instruction.	PD, SBCEU, UNIV CREDIT
LEVEL 5 Teaching	Few users	Development of model lessons, units using technology in the classroom (18 weeks or longer) that will improve instruction. Applies learning from previous levels to teach others.	PD, SBCEU, UNIV CREDIT

Essential Technology Professional Development

At Battle Creek Public Schools, our teachers strive to bring out the best in all our students. In addition to the teachers being instructors of knowledge, they are required to infuse technology into their lesson plans and curricular area. The majority of the teachers' day is in the classroom directing instruction, connecting their students to technology resources, individually coaching them in their work, helping them develop projects and communicating with their parents. As a result, elementary instruction does not occur on a daily basis and in order to provide developmentally appropriate learning in technology, a foundation must be established before technology integration can be introduced into the classroom.

Accordingly, the table of Essential Technology Professional Development (Appendix G) provides Battle Creek Public Schools a detailed blueprint for administrators, teachers, and other staffs professional development requirements while addressing the technology developmental needs of our students. As a valuable resource for teachers, the essential technology professional development is aligned with both NCLB requirements and the [ISTE](#).

Professional Development Activities

- A. The Battle Creek Public Schools Technology Supervisor and district Technology Trainer collaborate with principals, the curriculum department and teachers to identify, promote and deliver most of the ongoing district-wide technology professional development offerings.
- B. The [KALPA](#) online professional development management system is used by Battle Creek Public Schools to track teachers' professional development growth.
- C. The NETS and State of Michigan standards for professional development are used as our guides for developing appropriate professional development activities for all staff.
- D. All ongoing professional development classes are designed to provide but are not limited to the following examples:
 1. **Skills Development for New Technology**
 - a. Office productivity software integration will be conducted for teacher groups, administrators and other staff at different dates and locations throughout the year
 - b. Atomic Learning is available to all staff, students and their families
 - c. Technology training is available for administrators
 - d. 21 Things for Educators
 - e. DataDirector Professional Development
 - f. Training for Moodle integration
 2. **Integration Ideas and Techniques for Existing Technology**
 - a. Student research techniques, elementary and secondary, using Microsoft Encarta 2007, Microsoft One Note 2003 and Microsoft Office 2007
 - b. [Harcourt Connected Learning: Tech and University](#) training for all twenty-six teachers in the One-to-One programs
 3. **Exposure to Future Technology**
 - a. High school teachers will be trained in the use and in the integration of several student response systems available to them.
 - b. High school teachers, and some elementary school teachers, will receive and be trained in the use of wireless slates, which each one will receive during the 2010-11 school year.
 - c. High school teachers, and some elementary teachers, will be trained in the use and in the integration of interactive white boards available to them.

Professional Development Timeline

2011-2012

- 21 Things for Educators
- DataDirector
- Moodle
- Data for Student Success (Data4SS)
- Office productivity software integration
- ISD courses

2012-2013

- PD will be determined based on teacher and student needs

2013-2014

- PD will be determined based on teacher and student needs

SECTION 10 - SUPPORTING RESOURCES

Strategies and supporting resources such as services, software, other electronically delivered learning materials, and print resources that will be acquired will ensure successful and effective uses of technology.

To ensure successful and effective uses of technology district-wide, Battle Creek Public Schools utilizes the following supporting resources:

- National Educational Technology Standards provides the foundation for all technology professional development.
- MACUL conference and workshops expose teachers to new technologies, softwares, best practices, and technology resources.
- MITES conference for Manufacturing Technology Teachers.
- Access to the Regional Educational Media Center (REMC) online video library.
- Use of trainings provided by ISD.
- [Computer Support Page](#) of collected resources, One Stop Shopping.
- Teachers are issued a laptop for year-round use to assist them in instruction and in their own professional development.
- Battle Creek Public Schools has developed [in-district content](#) for technology integration distributed via [internal web sites](#).
- Battle Creek Public Schools subscribes to [Atomic Learning](#) for technology skills development
- Battle Creek Public Schools uses [KALPA](#) online professional development management system to track teachers' professional development growth.
- Macomb ISD - 21 Things for Educators

INFRASTRUCTURE, HARDWARE, TECHNICAL SUPPORT AND SOFTWARE

SECTION 11 - INFRASTRUCTURE NEEDS/TECHNICAL SPECIFICATION AND DESIGN

Strategies to identify the need for telecommunication services, hardware, software, and other services to improve education or library services, and strategies to determine interoperability among the components of technologies to be acquired.

Current Technology Environment

To create a truly rich technology culture, Battle Creek Public Schools uses a variety of technologies to implement instructional strategies that provide all stakeholders with powerful learning opportunities and experiences. Battle Creek Public Schools currently has approximately 4,000 workstations in its 20 buildings. The workstation platforms are approximately 89% Windows, 10% LINUX and 1% Macintosh, standardized on Windows XP. Most school buildings have one or more wired computer lab while every school building has wireless coverage for one-to-one computers for approximately 950 students, thus far.

Networks (WAN/LAN)

Battle Creek Public Schools currently has 18 buildings connected via a fiber wide area network (WAN) with the head-end located at the high school. The head-end connection at the high school runs to Calhoun Intermediate School District via a gigabit fiber connection. All of the school buildings link back to the high school for their network connections.

All of the elementary, middle school, and high school buildings have wireless local area networks (LAN)s. In addition, Battle Creek Central High School, Springfield Middle School, Northwestern Middle School, South Hill Academy, W.K. Kellogg Middle School, and Valley View Elementary School have hard-wired copper in all of the classrooms.

Hardware

HARDWARE			
<i>Computers</i>	<i>Printers</i>	<i>Classroom Equipment</i>	<i>Servers</i>

<ul style="list-style-type: none"> • Teacher Laptops • One to One Laptops • Mini-Laptops • Ultra-Mobile Personal Computers (UMPC) • Handheld Devices 	<ul style="list-style-type: none"> • Networked laser printers available, to all users, in every building . 	<ul style="list-style-type: none"> • LCD Projectors • Document Cameras • digital still/video cameras • Mobile Labs/Carts • (VOIP) Telephone • Interactive white boards • Wireless Slate Board • Distributed Video • Room Multi-Device Controller • Student Response Systems • Remote Image Devices • Sound Field Amplification • Projection Screen • Public Address/Paging System • Ceiling Mounted Video Camera • MP3 Players 	<ul style="list-style-type: none"> • Novell • Windows 2003 • Windows 2008 • Linux-Ubunutu & Fedora • Moodle • Macintosh
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Software

DISTRICT SOFTWARE		
<i>Administrative</i>	<i>Curriculum</i>	<i>Other</i>
<ul style="list-style-type: none"> • MS Office2007 • Novell Client • Zenworks Client • GroupWise Client • MS One Note • Symantic Anti-virus • Adobe Reader 	<ul style="list-style-type: none"> • Moodle • Renaissance Learning • Cognitive Learning • Plato • Michigan Virtual High School (MIVU) • Nova-Net • Discovery Education 	<ul style="list-style-type: none"> • Multi-media CD • Gaggle.net Student Email • Atomic Learning

Administrative Systems

The District has a consortium arrangement with Calhoun ISD for the majority of its administrative systems. The Calhoun ISD provides support to Battle Creek Public Schools, and other districts in Calhoun County, for the administrative systems it accesses through Wayne RESA. Following are the administrative systems currently used by the district:

Cyborg System – The Payroll and Human Resources departments use this management system to perform department tasks and record-keeping.

Financial System – The Business office uses WISE and SMART financial systems software to perform administrative tasks and record-keeping.

Zangle – Provided through the Calhoun ISD, this student management software offers increased online capabilities for parents, students, administrators, teachers, and other district staff including food service management, a student grading system, parent/

student web portals, and an attendance reporting mechanism. This software also allows teachers access to student information as well as capabilities to download information on either their laptops or on their handheld devices. The district, in conjunction with the Calhoun ISD, is exploring the adoption of a new student information system. This will be used in the district beginning the 2012-13 school year.

MPulse – This software is used by the Maintenance Department to track and to schedule maintenance throughout the district.

CEO Imaging – Battle Creek Public Schools uses this system for digital archive purposes.

Polyplot – This software, used by the district's transportation department, allows for developing and maintaining complete, detailed bus route schedule information.

Email – The GroupWise email system gives all administrators, teachers, and other staff the ability to communicate with one another as well as access to important information quickly and efficiently.

Kronos – This time keeping application, with nineteen time clocks, assists the district in monitoring employee time and attendance.

DataDirector – Battle Creek Public Schools utilizes this data warehousing service to collect, to compile, and to analyze data for reporting instruction analysis and for modification purposes.

Website Hosting - Battle Creek Public Schools currently hosts its website, which is divided into sections by buildings and departments. Each building and department are responsible for maintaining their own sections. Main support, training, and maintenance for the site is done primarily by the Technology Department.

SchoolMessenger - Battle Creek Public Schools uses SchoolMessenger for attendance calling, school notifications, and emergency notifications. These services are used in two ways:

- a. The attendance calling and non-emergency school notifications are run through a desktop system, with 12 phones lines, from the administration building.
- b. The emergency calling system is hosted by the vendor.

Moodle - Battle Creek Public Schools uses Moodle, a course management system, as an intranet service for collaboration and as a platform for document sharing.

Future Technology Needs

Battle Creek Public Schools will continually evaluate future technology needs to enhance

teaching and learning. New technologies are evaluated and implemented based on funding availability and relevance to our district's mission, vision, and goals for technology. New technologies acquired by the district will provide the opportunity for appropriate professional development to ensure effective use. Furthermore, the district is continuing the development of a new district website during the course of this three year plan.

Technical Support

To meet the district's needs and to achieve our technology integration goals, Battle Creek Public Schools has a quality technology staff that consists of the following positions: (1) Computer Technician Supervisor and (1) Software Engineer and Trainer. To augment our increasing need for technical support, the district utilizes other supporting resources including Novell ZenWorks remote desktop, a web-based work order system, off-site server backup, and Manpower temporary hardware technicians. Our technicians perform site visits as needed, respond to email and voice requests for support, perform remote assistance when applicable, and manipulate data for the benefit of the district. These contracted services depend on the nature of support required and are based on the area of greatest need.

SECTION 12 - INCREASE ACCESS

Strategies to increase access to technology for all students and all teachers.

Battle Creek Public Schools plans to implement and to improve the quality of our existing and any new technologies over the course of this three-year plan. Additionally, the professional development for all technology use will provide each user with the skills to utilize existing and newly procured technology to its fullest capacity. The district will follow the implementation time-lines specified in the Capital Projects (Appendix H).

Digital Divide

As an urban school district, Battle Creek Public Schools has a high percentage of students without access to technology in their homes. The State of Michigan Information Technology Strategic Plan identifies the “Digital Divide” as one of the challenges facing some school districts throughout the state. This Digital Divide is a gap that disproportionately affects minority groups in Battle Creek. Providing support towards closing this gap can translate into higher levels of student achievement because children need to learn how to access information using technology in a variety of ways to be successful in the future. Unless we, as a community, can teach our children to use the tools of an electronic age, they will be at a severe disadvantage.

To address this Digital Divide, Battle Creek Public Schools has developed and has established several business and community partnerships to acquire new technology. Continuing with these efforts will help the district provide access to technology within our community and provide our students with technology tools to extend learning into their homes.

Community Partnerships

In the future, and to serve the long-term needs of all stakeholders, Battle Creek Public Schools plans to continue cultivating partnerships with various community groups. During the previous three-year technology plan, the district had several established relationships that assisted us in our efforts to increase technology access for all of our stakeholders. These partnerships include, but are not limited to, Kellogg, Kellogg Community College, State Farm, and the Social Security Administration, which has increased our student-to-computer ratio.

Student Learning and Access Levels

Technology can deliver equity in education like never before; the dilemma however is in access to that technology by impoverished urban children whose only access is at school. Just as we serve our children breakfast, lunch, and often dinner, when it comes to technology we must provide children with not only access, but with more technology-rich learning experiences to prepare them to be technology literate in the 21st Century.

In the areas of network access and equipment use, Battle Creek Public Schools’ students have at least a weekly access to technology while several grade levels have daily access. In the areas of technology integration, professional development and software expenditure, the students have a monthly access level.

At Battle Creek Public Schools, our goal is to achieve anytime/anywhere access to technology. The following table outlines the instructional technology needs based on desired level of student access to technology.

Category	Daily Access	Anytime/Anywhere Access
Network	District Fiber WAN	District Fiber WAN
Student Multi-media/Internet Connected Workstation	1:2 computer/student ratio	1:1 computer to student ratio
Networked Laser Printer	1:50 printer/student ratio	1:25 printer to student ratio
Data Projector with VCR or DVD	1:50 projector/student ratio	1:25 projector to student ratio
Wireless Cart of 15 Laptops	1:50 cart/student ratio	1:25 cart to student ratio
Digital Camera	1:100 camera/student ratio	1:30 camera to student ratio
Scanner	1:150 scanner/student ratio	1:75 scanner to student ratio

FUNDING AND BUDGET

SECTION 13 – BUDGET AND TIMETABLE

Timeline and budget covering the acquisition, implementation, interoperability provisions, maintenance, and professional development related to the use of technology to improve student academic achievement.

TECHNOLOGY DEPARTMENT BUDGET 2011-2014

Category	Detail	Projected Cost			Funding Source(s)
		2011-2012	2012-2013	2013-2014	
Infrastructure					
	Fiber Connectivity	\$215,000	\$215,000	\$215,000	USF and General Fund
	Wiring at Elementary Schools except Valle View Elementary and one computer lab at Northwestern Middle School	\$140,553.90	\$0	\$0	USF and General Fund
	Replacing of Network Switches in all buildings except Valley View Elementary and BC Central High School	\$267,992.30	\$0	\$0	USF and General Fund
	Replacement due to failure (Infrastructure cabling)	\$10,000	\$10,000	\$10,000	Technology Fund
Hardware					
	Computer Replacement Plan	\$500,000	\$500,000	\$500,000	Tech / General Fund
Software Site Licenses					
	Novell Network	\$14,850	\$14,850	\$14,850	Tech Fund

	Novell GroupWise	\$2,970	\$2970	\$2970	Tech Fund
	Google E-Mail	\$0	\$0	\$0	
	Filtering Software	\$300	\$300	\$300	Tech Fund
	Management Software	\$0	\$0	\$0	Tech Fund
	Microsoft Office	\$0	\$0	\$0	Tech Fund
	Operating System Upgrades	\$0	\$0	\$0	
	Symantec Antivirus	Paid up to 2012 - 2013	Paid up to 2012 - 2013	\$13,000 / per year	
	DataDirector	\$0	\$0	\$0	
Maintenance					
	Repairs	\$190,000	\$190,000	\$190,00	Tech Fund
Personnel					
	Technician Supervisor	\$97,015	\$97,015	\$97,015	Tech Fund
	Software Engineer/Trainer/ Database Analyst	\$96,025	\$96,025	\$96,025	Tech Fund
	Technicians	\$130,000	\$135,000	\$ 140,000	Tech Fund
	Contracted Services	\$30,000	\$40,000	\$50,000	Tech Fund
	Staff Software Training	\$0	\$0	\$0	
Training					
	Technician Training	\$2,000	\$2,000	\$2,000	Tech Fund
	MACUL Conference (Teachers)	\$5,000 (subs included)	\$5,000 (subs included)	\$5,000 (subs included)	Title IID

SECTION 14 - COORDINATION OF RESOURCES

Strategies that will be employed to coordinate available state and local resources to implement activities and acquisitions prescribed in the technology plan.

Universal Service Fund (USF) E-rate Program

Battle Creek Public Schools has applied for, and will continue applying for, funding through the USF E-rate Program. This program is a federal program created to provide discount reimbursements and to assist most schools and libraries with obtaining affordable technologies, including telecommunications, Internet access, and student emails. The discount reimbursements are based on an individual schools' enrollment in the National School Lunch program. Battle Creek Public Schools anticipates obtaining approximately 80% annual average reimbursement from the E-rate program for telecommunications and Internet access services as well as needed equipment. For a complete list of requested E-rate products and services for this three-year technology plan, see Appendix I.

Technology Grants

Battle Creek Public Schools will continue to seek out federal and state grants that will assist in implementing our long-range technology plan. Any grant funds received will be disbursed according to the goals and the objectives outlined in this technology plan. Accordingly, our technology plan will evolve as new technologies arise. To avoid duplication of funds, we will annually update our technology plan to reflect any technologies acquired with grant funds.

MONITORING AND EVALUATION

SECTION 15 - EVALUATION

Strategies that the district will use to evaluate the extent to which activities are effective in integrating technology into curricula and instruction, increasing the ability of teachers to teach, and enabling students to reach challenging State academic standards.

Technology Integration and Academic Achievement

The federal and state K-12 Technology Benchmarks help classroom teachers track their students' technology development and progress toward achieving academic success. Since item analysis can help pinpoint weak areas in technology skills to eliminate gaps, Battle Creek Public Schools conducts teacher surveys to monitor understandings of technology integration within each curricular area. Furthermore, the annual technology literacy assessment for eighth graders is required whereby the assessment results are analyzed by the technology teachers and used to develop lesson plans for each school.

A Technology Plan evaluation committee will convene in September of 2011 to begin the annual monitoring of our Technology Integration Goals to determine the extent to which they are, or have been, achieved. Any unmet goals will be addressed at subsequent curriculum committee meetings with the technology coordinators to determine why the goal(s) have not been met and what additional strategies and action steps, if any, are needed to achieve them in the future.

Technology Plan Evaluation

In addition to the semi-annual evaluation of the Technology Curriculum Integration goals, the district plans to assess and to evaluate the entire Technology Plan's impact and progress on an annual basis. A Technology Plan evaluation committee comprised of both the Technology and Curriculum staff and Instruction Department staff will evaluate the Technology. The Director of Technology Planning and Design and the Assistant Superintendent of Instruction & Curriculum will co-chair the committee. The Technology Plan evaluation committee will convene in September of 2011 to begin monitoring our Technology Plan goals, strategies, and objectives. Once the technology plan evaluation is completed (Appendix J), the committee will post the findings on a collaborative site in Moodle.

SECTION 16 - ACCEPTABLE USE POLICY

CIPA Compliance

Battle Creek Public Schools will comply with the requirements of the Children's Internet Protection Act, as codified at 47 U.S.C. § 254(h) and (l). Battle Creek Public Schools is committed to assuring the safe conduct of all our students, while on the Internet, and has a comprehensive policy about the proper use of our technological resources. At the beginning of each school year, students and staff are made aware of the district's Acceptable Use Policy and must sign an Internet use agreement before they are allowed access to the Internet.

Broadband Data Improvement Act (BDIA)

In compliance with the Broadband Data Improvement Act of 2008, Battle Creek Public Schools will educate students on Internet safety including appropriate online behavior, interacting with other individuals on social networking websites and in chat rooms, and cyber-bullying awareness and response.

Filter Efforts

Battle Creek Public Schools intends to preserve network bandwidth and to improve network response times by limiting Internet access to educational-related sites. The filtering device used to block and to filter access to the Internet from objectionable and obscene sites is Dan's Guardian, managed by the Calhoun ISD; thereby ensuring compliance with government policies (CIPA) and maintaining a positive network environment.

Acceptable Use Policies (AUP)

Battle Creek Public Schools, in cooperation with administrators, teachers, and other staff, has a comprehensive Acceptable Use Policy (Appendix K) for our technology and monitors the acceptable use policy through staff and student observation and through acquired filtering devices.

APPENDIX A – SCHOOLS AND FACILITIES

Battle Creek Public Schools

Elementary Schools	Middle Schools	High School & Academies	Administrative Facilities
<p>Ann J. Kellogg Elementary</p> <p>306 Champion St. Battle Creek, MI</p>	<p>Northwestern Middle</p> <p>176 Limit St. Battle Creek, MI</p>	<p>Battle Creek Central High School</p> <p>100 W. Van Buren St. Battle Creek, MI</p>	<p>Administration Building</p> <p>3 W. Van Buren St. Battle Creek, MI</p>
<p>Coburn Elementary</p> <p>39 Fairhome Battle Creek, MI</p>	<p>Springfield Middle</p> <p>1023 Avenue A Battle Creek, MI</p>	<p>Math & Science Center</p> <p>765 Upton Avenue Battle Creek, MI</p>	<p>Commissary</p> <p>4661 West Dickman, Suite E Battle Creek, MI</p>
<p>Dudley Elementary</p> <p>308 W. Roosevelt Battle Creek, MI</p>	<p>WK Middle School</p> <p>60 VanBuren St. Battle Creek, MI</p>	<p>MYCA (Michigan Youth Challenge Academy)</p> <p>5500 Armstrong Rd. Battle Creek, MI</p>	<p>Facilities/Operations/Transportation</p> <p>315 West Goodale Battle Creek, MI</p>
<p>Franklin Elementary</p> <p>20 Newark St. Battle Creek, MI</p>	<p>I</p>	<p>South Hill Academy</p> <p>50 Spencer St. Battle Creek, MI</p>	

<p>Fremont Elementary</p> <p>115 E. Emmett St.</p> <p>Battle Creek, MI</p>		<p>Outdoor Education Center</p> <p>10160 S. M-37 Hwy.</p> <p>Dowling, MI</p>	
<p>LaMora Park Elementary</p> <p>65 North Woodlawn</p> <p>Battle Creek, MI</p>		<p>Miller Stone#</p> <p>77 Capital Avenue</p> <p>Battle Creek, MI</p>	
<p>Urbandale Elementary</p> <p>123 N. Bedford Rd.</p> <p>Battle Creek, MI</p>			
<p>Valley View Elementary</p> <p>960 Avenue A</p> <p>Battle Creek, MI</p>			
<p>Verona Elementary</p> <p>825 Capital Ave., N.E.</p> <p>Battle Creek, MI</p>			

APPENDIX B - TECHNOLOGY PLANNING COMMITTEE

Battle Creek Public Schools

CENTRAL OFFICE	ADJUNCT STAFF	PARENTS / COMMUNITY MEMBERS	TECHNOLOGY STAFF
<p>Julie McDonald Interim Curriculum Director</p>	<p>Mike Oswalt Assistant Superintendent Regional Technology Services Calhoun Intermediate School District</p>	<p>Todd Stagner</p>	<p>Chad Osborn Technology Supervisor</p>
		<p>Steve Hoelscher</p>	<p>Abdiel Rosario Software Engineer/Trainer</p>
		<p>Karen Evans</p>	

* Others will be added as needed

Appendix C – RESEARCH BASED TECHNOLOGY CURRICULUM

Raising Student Achievement with Technology: Research Base for District Philosophy and Direction

ERIC Identifier: ED479843

Publication Date: 2003-09-00

Author: Barnett, Harvey

Source: ERIC Clearinghouse on Information & Technology

Investing in Technology: The Payoff in Student Learning

Imagine this moment in your life as a school administrator. A skeptical school board member, prospective parent, or local public official visits your school and, after a tour in which you point out the wonderful new computers, scanners, digital cameras, and other technology which you've acquired over the past few years, says to you, "You've clearly made a tremendous investment in technology. How do you know this investment will pay off in terms of student learning?"

This ERIC Digest reviews some significant research on technology use in the classroom that attempts to answer this question and indicates the conditions under which technology is most likely to have a positive impact on student learning.

RESEARCH ON THE USE OF TECHNOLOGY IN THE CLASSROOM

Educational researchers have studied two major ways in which students use computers in schools. The first is learning from computers. Here the computer acts as tutor. The computer presents information to the student and the student responds. Simple drill and practice programs and more comprehensive Integrated Learning Systems, such as Jostens and Computer Curriculum Corporation, are examples of this category.

Researchers have also focused on how students learn with computers. Here, students

use computers and other technologies to write, analyze data, develop presentations, and do research.

LEARNING FROM COMPUTERS: COMPUTERS AS TUTORS

Let us look at two longitudinal studies on how students learn from computers. The first is the West Virginia Basic Skills study (Mann, Shakeshaft, Becker & Kottkamp, 1999; West Virginia Study Results, 1999).

West Virginia began implementing computer technology one grade at a time, starting with first grade. Each year the state added a grade until reaching Grade 6. Each year included extensive teacher training. Schools had the option of placing computers in classrooms or in a lab. Schools were also required to select from suites of software that matched West Virginia's content standards. Researchers followed students from first grade to sixth grade, and beyond. The researchers found the following when students used computers as tutors to receive information:

- (1) On statewide tests, students who learned from computers showed consistently higher gains. The researchers were able to determine that 11% of the gain was due to the use of technology.
- (2) Students did better when the computers were in the classroom rather than a lab.
- (3) The advantages of computer use extended through high school, where students learning from computers had better grades, took more advanced placement courses and were more likely to graduate than those who did not use computers.

Another important study is Project CHILD from Florida (Butzin, 2000). Project CHILD placed computers in classrooms and, like the West Virginia project, provided extensive teacher training and had students use software that was aligned with the state's content standards. The Project CHILD researchers found that when students used computers as tutors to receive information

- a. Computers contributed to higher scores for students in both low- and high-achieving schools
- b. Students had better discipline
- c. The boost that technology gave students was sustained over time, which was also the case in the study of computer use in West Virginia.

The studies in West Virginia and Florida show that students can gain an advantage when technology is deployed to bolster and complement the traditional work of teachers and that the effects of learning from computers are lasting. These results are obtained where there is on-going teacher training and where computers are available for use in the classroom.

LEARNING WITH COMPUTERS: COMPUTERS AS TOOLS

What does the research say about the effects of technology when it is used as a tool rather than a tutor? How is learning with computers different from learning from computers? The application of technology here is even more powerful, as the following studies demonstrate.

In a study sponsored by Apple Computer that spanned ten years, researchers, who were from institutions of higher education and not Apple employees, analyzed Apple's Classrooms of Tomorrow project, known to many by the acronym ACOT (Fisher, Dwyer & Yocam, 1996; Sandholtz, Ringstaff & Dwyer, 1997). In ACOT classrooms, technology was pervasive and available anytime a student needed to write, analyze data, develop presentations, and do research. Teachers received intensive training and were given time to examine their beliefs about instruction and learning. Researchers arrived at four critical conclusions.

- a. Students routinely used higher-order thinking skills far beyond what was expected for their grade level.
- b. Students demonstrated enhanced ability to collaborate with peers to develop projects and reports.
- c. Students demonstrated increased initiative. They maintained time on task for longer periods and often continued their work during recess, before school, and after school.
- d. The use of technology coupled with teachers having time for reflection led, over a period of three to five years, to substantial changes in teacher beliefs about teaching and learning.

The ACOT findings are reinforced by a recent study of the Challenge 2000 Multimedia Project conducted by SRI International (Penuel, Golan, Means & Korbak, 2000). In the

Multimedia Project, teams of K-12 teachers were trained to develop curriculum-based multimedia projects with students. The teachers received intensive on-site support.

In the final evaluation of the 5-year long project, the researchers asked students in project and non-project classrooms to complete an authentic assessment task. All students were given a set of resources and data about homeless students and the problems such students face in attending school. In small groups, students had to study the information, formulate a set of recommendations for their school leaders on how their own school might better serve the needs of homeless students, and create a prototype of a brochure for advocating their position. The brochures were evaluated using a rubric especially developed by SRI to help measure the impact of the use of technology.

What did SRI's researchers find? Students in Multimedia Project classrooms consistently out-scored their peers in the non-project classrooms in the areas of understanding content, adapting their message to their intended audience, and applying principles of design in the format and layout of their brochures.

Together, these studies point out how powerful technology can be when it is employed as a tool for research, data analysis, and communication. Does that mean we abandon the use of computers for simply acquiring specific facts and rudimentary skills? Of course not. We have to remember that it is never a question of either learning with computers or learning from them, but rather a balance between instruction and construction based on the objectives of the lesson.

IMPACT ON LEARNING

Whether students learn from computers or with computers, the research cited above indicates the following conditions under which computer technology is most likely to have a positive impact on learning.

Access: Computers will enhance learning only when students have easy access to them in their classroom. Using computers once or twice a week will have negligible impact on student learning.

Integration: Computers make their greatest impact on student learning when their use

is tightly linked to content standards and integrated into ongoing classroom work, rather than taught as a separate or stand-alone subject.

Broad-based reform: The computer is just one tool in a broad-based reform effort to improve student learning. Just as computer use needs to be integrated within the ongoing instructional program, so technology planning needs to occur within the context of the entire school or district strategic planning process.

The long term: Like any other reform effort, computer use is not a one-time event. It is not simply a matter of "buy them, install them and sit back to enjoy the difference they make." It will require a long-term effort on the district's part to fund, support and assess their use.

Professional development: Having a swimming pool does little good if no one can swim, and learning to swim well is not done in a couple of after-school workshops. To empower teachers and students to learn with computers, districts will need to plan for ongoing staff development that takes place in large groups, one-on-one, and online.

Teaching style: For technology to have the impact research says it can, many teachers will have to learn more than new technology skills; they will need learn new instructional strategies and new roles. Districts will need to ensure that teachers have the opportunity and support to transform their approach to teaching.

Balance: Like any reform effort, one does not throw out the baby with the bath water. There is always a balance. Yes, teachers need to teach facts; but they also must help students acquire and use the intellectual and workplace skills demanded by the 21st Century.

Vision: As the research on effective principals demonstrates again and again, leadership is the single most important factor affecting the successful integration of technology in education. Principals and superintendents must have a vision of how technology will support student learning and teacher productivity.

CONCLUSION

The research reviewed in this ERIC Digest demonstrates that technology can make

a difference in how and what students learn. Technology is one piece of the puzzle that can support educational change, but technology will have little impact without accompanying reform at the classroom, school, and district level.

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APPENDIX D – K-12 BENCHMARKS

Standards for successful use of technology are based on the following NETS categories for students (NETS-S), teachers (NETS-T) and administrators (NETS-A):

Students

1. Basic Operations and Concepts
2. Social, Ethical, and Human Issues
3. Technology Productivity Tools
4. Technology Communications Tools
5. Technology Research Tools
6. Technology Problem-Solving and Decision-Making Tools

Teachers

1. Technology Operations and Concepts
2. Planning and Designing Learning Environments and Experiences
3. Teaching, Learning, and Curriculum
4. Assessment and Evaluation
5. Productivity and Professional Practice
6. Social, Ethical, Legal, and Human Issues

Administrators

1. Leadership and Vision
2. Learning and Teaching
3. Productivity and Professional Practice
4. Support, Management, and Operations
5. Assessment and Evaluation
6. Social, Legal, and Ethical Issues

**K-12 Grade level Benchmarks Aligned with
National Educational Technology Standards for Students (NETS-S)**

NETS FOUNDATION STANDARDS FOR STUDENTS	BATTLE CREEK PUBLIC SCHOOLS STRANDS
1) Basic Operations and Concepts	1.1 Basic Operations
2) Social, Ethical, and Human Issues	2.1 Social, Ethical, and Human Issues
3) Technology Productivity Tools	3.1 Word Processing
Classroom Examples:	3.2 Spreadsheet
	3.3 Database
	3.4 Drawing, Painting, and Graphics
	3.5 Presentation
	3.6 Multimedia
4) Technology Communication Tools	4.1 Communication and Research
5) Technology Research Tools	5.1 Communication and Research
6) Technology Problem-solving and Decision-making Tools	6.1 Problem Solving

*

The above sample illustrates the student technology skills needed for the Word Processing
DISTRICT TECHNOLOGY PLAN 2011-2014

Strand. **Note:** Skills are taught beginning in PRE-K and Kindergarten; first, introduced then developed, then mastered, and finally applied as the student moves up each grade level.

APPENDIX E – National Educational Technology Standards (NETS)

Teachers

1. Technology Operations and Concepts
 - a. Teachers demonstrate a sound understanding of technology operations and concepts.
2. Planning and Designing Learning Environments and Experiences
 - a. Teachers plan and design effective learning environments and experiences supported by technology.
3. Teaching, Learning, and the Curriculum
 - a. Teachers implement curriculum plans that include methods and strategies for applying technology to maximize student learning.
4. Assessment and Evaluation
 - a. Teachers apply technology to facilitate a variety of effective assessment and evaluation strategies.
5. Productivity and Professional Practice
 - a. Teachers use technology to enhance their productivity and professional practice.
6. Social, Ethical, Legal, and Human Issues
 - a. Teachers understand the social, ethical, legal, and human issues surrounding the use of technology in PK-12 schools and apply those principles in practice.
7. Administrators
 - a. Leadership and Vision
 - i. Educational leaders inspire a shared vision for comprehensive integration of technology and foster an environment and culture conducive to the realization of that vision.
 - b. Learning and Teaching
 - i. Educational leaders ensure that curricular design, instructional strategies, and learning environments integrate appropriate technologies to maximize learning and teaching.
 - c. Productivity and Professional Practice
 - i. Educational leaders apply technology to enhance their professional practice and to increase their own productivity and that of others.
 - d. Support, Management, and Operations
 - i. Educational leaders ensure the integration of technology to support

- productive systems for learning and for administration.
- e. Assessment and Evaluation
 - i. Educational leaders use technology to plan and to implement comprehensive systems of effective assessment and evaluation.
 - f. Social, Legal, and Ethical Issues
 - i. Educational leaders understand the social, legal, and ethical issues related to technology and model responsible decision making related to these issues.
 - g.
 - h. **Others: Technology Facilitators**
 - i. Technology Operations and Concepts
 - Educational technology facilitators demonstrate an in-depth understanding of technology operations and concepts.
 - ii. Planning and Designing Learning Environments and Experiences
 - Educational technology facilitators plan, design, and model effective learning environments and multiple experiences supported by technology.
 - iii. Teaching, Learning, and the Curriculum
 - Educational technology facilitators apply and implement curriculum plans that include methods and strategies for utilizing technology to maximize student learning.
 - iv. Assessment and Evaluation
 - Educational technology facilitators apply technology to facilitate a variety of effective assessment and evaluation strategies.
 - v. Productivity and Professional Practice
 - Educational technology facilitators apply technology to enhance and to improve personal productivity and professional practice.
 - vi. Social, Ethical, Legal, and Human Issues
 - Educational technology facilitators understand the social, ethical, legal, and human issues surrounding the use of technology in PK-12 schools and assist teachers in applying that understanding in their practice.
 - vii. Procedures, Policies, Planning, and Budgeting for Technology Environments
 - Educational technology facilitators promote the development and the implementation of technology infrastructure, procedures, policies, plans, and budgets for PK-12 schools.
 - viii. Leadership and Vision

- Educational technology facilitators will contribute to the shared vision for campus integration of technology and foster an environment and culture conducive to the realization of the vision.

APPENDIX F - TECHNOLOGY CURRICULUM REVISION SCHEDULE

TECHNOLOGY SUBJECT BY SCHOOL	2011-2012	2012-2013	2013-2014	2014-2015
K-12 Technology Integration Benchmarks	Review & Revise	Revise and Finalize	Implement Year 1	Implement Year 2
ELEMENTARY SCHOOL				
Enrichment: Social Studies and Technology Integration	Implement Year 2	Implement Year 3	Implement Year 4	Review & Revise
MIDDLE SCHOOL				
Living With Computers	Implement Year 3	Implement Year 4	Review & Revise	Revise and Finalize
Manufacturing Technology	Implement Year 3	Implement Year 4	Review & Revise	Revise and Finalize
HIGH SCHOOL				
Living With Computers	Implement Year 1	Implement Year 2	Implement Year 3	Implement Year 4
Working with Computers I	Implement Year 1	Implement Year 2	Implement Year 3	Implement Year 4
Working with Computers II	Implement Year 1	Implement Year 2	Implement Year 3	Implement Year 4
Programming with Computers I	Implement Year 1	Implement Year 2	Implement Year 3	Implement Year 4
Web Design	Implement Year 4	Review & Revise	Revise and Finalize	Implement Year 1
Marketing	Implement Year 4	Review & Revise	Revise and Finalize	Implement Year 1
Intro to Business	Implement Year 1	Implement Year 2	Implement Year 3	Implement Year 4
Accounting I	Implement Year 1	Implement Year 2	Implement Year 3	Implement Year 4
Accounting II	Implement Year 1	Implement Year 2	Implement Year 3	Implement Year 4

APPENDIX G – ESSENTIAL TECHNOLOGY PROFESSIONAL DEVELOPMENT

Battle Creek Public

GRADE LEVEL	SKILL	ESSENTIAL PD	DESCRIPTION	STANDARD/ BENCHMARK
Lower EI	Keyboarding	Developmental strategies for teaching keyboarding in Early Elementary.	Letter, number, and word identification to support literacy and motor skill development. Typing words and simple sentences.	ISTE STANDARD 1 BCPS strand 1
Lower EI	Computer Basics	Developmental strategies for teaching computer basic skills to grades K-2.	Parts of a computer, Menu navigation, Intro to the word processor and the web browser.	ISTE STANDARD 1 BCPS Strand 1
Lower EI	Word Processing	Developmental strategies for teaching word processing grades K-2.	Writing letters, numbers and words to support development of literacy skills with technology.	ISTE STANDARD 3 BCPS Strand 3
Lower EI	Drawing	Developmental Strategies to teach computer drawing grades K-2.	Use Tux Paint to teach colors and shapes. Use templates to support elementary skills.	ISTE STANDARD 3 BCPS Strand 6
Lower EI	Internet	Developmental strategies for teaching the Internet grades K-2.	How to use the web browser. Internet safety. Develop a teacher-created web-quest for K-2. Discovery Education with K-2.	ISTE STANDARD 2, 4 BCPS Strand 2, 9
Upper EI	Keyboarding	Developmental strategies for teaching keyboarding in Upper Elem	Typing sentences and paragraphs, improving speed and accuracy. Ergonomics.	ISTE STANDARD 1 BCPS Strand 1
Upper EI	Computer Basics	Developmental strategies for teaching computer basic skills to grades 3-5	Review and further develop understanding in Parts of a computer, Menu navigation, word processor, spreadsheet, database, Presentation, and web browser.	ISTE STANDARD 1 BCPS Strand 1 BCPS Strand 3 BCPS Strand 4 BCPS Strand 5 BCPS Strand 7

Upper EI	Drawing	Developmental Strategies to teach computer drawing grades 3-5	Use Tux Paint for drawing illustrations for stories.	ISTE STANDARD 3 BCPS Strand 6
Upper EI	Word Processing	Developmental strategies for teaching word processing grades 3-5.	Typing sentences and paragraphs to build stories in support of literacy development.	ISTE STANDARD 3 BCPS Strand 3
Upper EI	Internet	Developmental strategies for teaching the Internet grades 3-5	How to use the web browser. Internet safety. Develop a teacher-created web-quest for grades 3-5 and Discovery Education with grades K-2.	ISTE STANDARD 2, 4 BCPS Strand 9
Upper EI	Communication	Email and Online Communication	How to use Gaggie Email for students grades 3-5	ISTE STANDARD 2, 4 BCPS Strand 9
Upper EI	Assessment	District Online Assessment	How to use district assessment tools to identify gaps in learning.	ISTE STANDARD 6 BCPS Strand 2, 10
Upper EI (4-5)	Technology Integration	Use technology to support core curriculum	Use of different applications, web pages, web-quests that integrate technology into the core curriculum.	ISTE STANDARD 2, 4,5,6 BCPS Strand 2, 9, 10
Middle School	Technology Literacy	Technology Assessment	Develop a technology literacy assessment for 8th grade	NCLB requirement Required by June 2006
Middle School	Office Applications	Developing lessons and units for Middle School	Develop lessons and units that will scaffold students into H.S. classes.	ISTE STANDARD 3 BCPS strand 3, 4, 5, 6
All Secondary	Modeling and Peer Scaffolding	Building a Model classroom	How to model in a technology classroom and develop peer scaffolding as a tool of differentiated instruction.	Classroom Management
High School	Office Applications	Raising the bar with Office Skills	Development of higher level lessons and units	ISTE STANDARD 3 BCPS strand 3, 4, 5, 6

APPENDIX H - CAPITAL PROJECTS

DISTRICT TECHNOLOGY PLAN 2011-2014

Battle Creek Public Schools

PROJECT	DESCRIPTION	START ESTIMATE
INFRASTRUCTURE		
VOIP	Network Electronics, Phones, and Cabling	Ongoing
Cat 6 in remodeled schools	From MDF to edge switch	Summer 2011
HARDWARE UPGRADES		
Audio Enhancement	In every classroom	Ongoing
Rotational replacement - four-year cycle	Upgrade instructional computers on a four-year cycle	Ongoing
Document Cameras	In every classroom	Ongoing
Projection Systems	Projection systems in every classroom	Ongoing
DISTRICT-WIDE PROJECTS		
District Website	Continue expansion of functionality with existing staff	Ongoing
Document Imaging System	Maximize utilization	Ongoing
Online Student Assessments	Maximize utilization	Ongoing
Data Collection with Intranet linkage to internal databases	Continue to identify and implement with existing staff	Ongoing
Standards-based reporting at Middle School	Continue expansion of functionality	Ongoing
Standards-linking to assignments at High School	Continue expansion of functionality	Ongoing

APPENDIX I – USF REQUESTED PRODUCTS AND SERVICES

Battle Creek Public Schools

(E-Rate FY11 - 2011-2012)

Telecommunications Services

Basic Telephone Service

Long Distance Service

Cellular Phone Service

Dedicated Line Service

Dedicated Line Service

Dedicated Line Service

Internet Access

Web Hosting

Wireless Internet Access

Network Infrastructure

Data drops in every classroom

Upgrade / standardize all switches in buildings

Internal connections

BASIC Maintenance OF INTERNAL CONNECTIONS

APPENDIX J – TECHNOLOGY PLAN EVALUATION

Battle Creek Public Schools

Components	Activities Completed	Next Steps	Challenges	Adjustments
<u>Staffing</u>				
Professional Development				
Technical Support				
Supporting Resources				
<u>Money</u>				
Project Funding				
<u>Time</u>				
Winter 2010				
Summer 2011				
Winter 2011				
Summer 2012				
Winter 2012				
Summer 2013				
Winter 2013				
Summer 2014				
<u>District-wide Projects</u>				
District Website				
Intranet Uses				
Document Imaging System				
Online Student Assessments				
Data Collection with Intranet linkage to internal databases				
Standards-based reporting at Middle School				
Standards-linking to assignments at High School				
Wireless Hot Spots on Secondary Campuses				
VOIP				
Cat 6 in remodeled schools				
Video Distribution				
Security cameras				
Proximity readers				

Storage server cluster				
<u>Hardware</u>				
Audio Enhancement				
Rotational replacement - four-year cycle				
Document Cameras				
Projection Systems				
<u>Communication</u>				
Communications				
Community Involvement				
Collaboration				
<u>Policies</u>				
Acceptable Use Policy				
<u>Impact</u>				
Impact on Student Achievement				
Impact on Instruction				

APPENDIX K – ACCEPTABLE USE POLICIES AND AGREEMENTS



BOARD OF EDUCATION

PROPERTY

BATTLE CREEK PUBLIC SCHOOLS

Acceptable usage policy and Agreement for Acceptable Use of BCPS Technology Resources *Students Grades K – 12*

_____ *Program Name*

_____ *Student Name* *Building/*

This agreement is entered into this ____ day of _____, 20____, between _____ (“Student” or “User”) and Battle Creek Public Schools (BCPS). The purpose of this agreement is to grant access to and define acceptable use of BCPS's Technology Resources for legitimate educational purposes consistent with BCPS's mission statement. “Technology Resources” include, but are not limited to: (1) internal and external network infrastructure, (2) Internet and network access, (3) computers, (4) servers, (5) storage devices, (6) peripherals, (7) software, and (8) messaging or communication systems. These resources may be provided to users to: (1) assist in the collaboration and exchange of information, (2) facilitate personal growth in the use of technology, and (3) enhance information gathering and communication skills.

In exchange for the use of BCPS's Technology Resources either at school or away from school, you understand and agree to the following:

1. Your use of BCPS's Technology Resources is a privilege that may be revoked by BCPS at any time and for any reason.
2. BCPS reserves all rights to any material stored on BCPS Technology Resources. You have no expectation of privacy when using BCPS Technology Resources. BCPS reserves the right to monitor all use of its Technology Resources, including, without limitation, personal email and voice mail communications, computer files, data bases, web logs, audit trails, or any other electronic transmissions accessed, distributed, or used through the Technology Resources. BCPS also reserves the right to remove any material from

the Technology Resources that BCPS, at its sole discretion, chooses to, including, without limitation, any information that BCPS determines to be unlawful, obscene, pornographic, harassing, intimidating, or disruptive.

3. The Technology Resources do not provide you a "public forum." You may not use the Technology Resources for commercial purposes or to lobby or solicit political positions or candidates unless expressly authorized in advance by a teacher or administrator as part of a class program or activity. You may, however, use the Technology Resources to contact or communicate with public officials.
4. BCPS's Technology Resources are intended for exclusive use by registered users. You are responsible for your account/password and any access to the Technology Resources made using your account/password. Any problems arising from the use of your account/password are your responsibility. Use of your account by someone other than you is forbidden and may be grounds for loss of access privileges and other disciplinary consequences for both you and the person(s) using your account/password.
5. You may not use the Technology Resources or any other communication/messaging devices (including devices not owned by BCPS) to engage in cyberbullying. Cyberbullying means "the use of email, cell phone and pager text messages, instant messaging (IM), defamatory personal websites, and defamatory online personal polling websites to support deliberate, repeated and hostile behavior by an individual or group that is intended to harm others." [Definition written by Bill Belsy, available at <http://www.cyberbullying.ca>.]
6. Misuse of Technology Resources may result in suspension of your account privileges and/or other disciplinary action, up to and including expulsion, as determined by BCPS. Misuse includes, but is not limited to:
 1. Accessing or attempting to access educationally inappropriate materials/sites including, without limitation, material that is "harmful to minors," unlawful, obscene, pornographic, profane, or vulgar. Material that is "harmful to minors" includes "any picture, image, graphic image file, or other visual depiction that (1) taken as a whole and with respect to minors, appeals to a prurient interest in nudity, sex, or excrement; (2) depicts, describes, or represents, in a potentially offensive way with respect to what is suitable for minors, an actual or simulated sexual act or sexual contact, actual or simulated normal or perverted sexual acts, or a lewd exhibition of the genitals; and (3) taken as a whole lacks serious literary, artistic, political, or scientific value as to minors." 47 USC§§ 254(h)(7). The determination of a material's "appropriateness" is based on both the material's content and intended use.
 2. Cyberbullying (as defined in paragraph E) or any other use of the Technology Resources that would violate BCPS's anti-bullying rules or policies. Cyberbullying may, without limitation, include posting slurs or rumors or other disparaging remarks about another

person on a website; sending email or instant messages that are meant to threaten, harass, intimidate, or drive up a victim's cell phone bill; taking or sending embarrassing or sexually explicit photographs, video, or other visual depictions of another person; or posting misleading or fake photographs of others on websites.

3. Sexting, which includes, without limitation, possessing, sending, or distributing nude, sexually explicit, or sexually suggestive photographs, videos, or other visual depictions of yourself or another person over BCPS's Technology Resources or by any other means, including over personally owned devices.
 4. Posting personally identifiable information about yourself or others over the internet even if the information is solicited by a website that requests such information.
 5. Vandalism, which includes, without limitation, any malicious or intentional attempt to harm, steal, destroy, or disrupt user data, school materials, or school hardware; violating the integrity of BCPS's Technology Resources; uploading or creating viruses; downloading/installing unapproved, illegal, or unlicensed software; or seeking to circumvent or bypass security measures.
 6. Hacking, which includes, without limitation, gaining or attempting to gain access to, modifying, or obtaining copies of, unauthorized information or information belonging to other users.
 7. Unauthorized copying or use of licenses or copyrighted software.
 8. Plagiarizing, which includes the unauthorized distributing, copying, using, or holding out as your own, copyrighted material (most of the Internet is copyrighted), or material written by someone else, without permission of, and attribution to, the author.
 9. Misrepresenting others, including, without limitation, posting confidential or inappropriate information (text, video, photo) meant to harass, intimidate, or embarrass other students or staff on any social media network or website.
 10. Allowing anyone else to use an account or not locking access to computer devices when leaving them unattended.
 11. Using or soliciting the use of, or attempting to use or discover the account information or password of, another user.
 12. Attempting to or successfully disabling security features, including technology protection measures required under the Children's Internet Protection Act (CIPA).
 13. Misusing equipment or altering system software without permission.
 14. Commercial for-profit activities, advertising, political lobbying, or sending mass mailings or spam. However, you may contact a public official to express an opinion on a topic of interest.
 15. Using the Technology Resources in any way that violates BCPS's student code of conduct, or any federal, state, or local law or rule.
1. It is the policy of BCPS, as a recipient of certain federal funds, to monitor the online

activities of its minor students and provide technology protection measures on its computers with Internet access designed to prevent minors from accessing visual depictions that are (1) obscene, (2) child pornography, or (3) harmful to minors. BCPS staff must regularly monitor to ensure that technology blocks are working appropriately. The technology blocks may be disabled by an authorized person, *during adult use*, to enable access to bona fide research or for other lawful purposes.

2. It is the policy of BCPS to prohibit its minor students from (1) accessing inappropriate matter on the Internet; (2) engaging in hacking or other unlawful online activities; (3) disclosing, using, or disseminating personal information online; or (4) accessing materials that are harmful to minors. It is also the policy of BCPS to educate students about cyberbullying awareness and response and about appropriate online behavior, including safely interacting with other individuals in social networking websites, chat rooms, and by email.
3. BCPS does not guarantee that measures described in paragraphs G and H will provide any level of safety or security or that they will block all inappropriate material from BCPS's minor students. You agree that you will not intentionally engage in any behavior that was designed to be prevented by paragraphs G and H.
4. BCPS does not warrant or guarantee that its Technology Resources will meet any specific requirement, or that they will be error free or uninterrupted; nor will BCPS or its Internet provider 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 Technology Resources.
5. When utilizing the BCPS Technology Resources, you may use only BCPS authorized messaging and communication systems. There is no expectation of privacy in electronic communications. BCPS reserves the right to monitor electronic communications.
6. As soon as possible, you must disclose to your teacher or other school employee any message you receive that is inappropriate or makes you feel uncomfortable, harassed, threatened, or bullied, especially any communication that contains sexually explicit content. You should not delete such content until instructed to do so by a staff member.
7. BCPS and/or the Internet provider will periodically determine whether specific uses of the BCPS's Technology Resources are consistent with this acceptable-use policy. BCPS or its Internet provider reserves the right to log Internet use and to monitor mail space and file server utilization by users. BCPS reserves the right to remove a user account on the BCPS's Technology Resources to prevent further unauthorized activity.
8. You may not transfer intellectual property or software belonging to BCPS without the permission of BCPS Technology Supervisor or his/her designee. Without first obtaining such permission, you will be liable for any damages and will be required to pay the cost of any damages caused by such transfer, whether intentional or accidental.

9. You are responsible for the proper use of Technology Resources and will be held accountable for any damage to or replacement of the Resources caused by your inappropriate use.

In consideration for the privileges of using the BCPS's Technology Resources and in consideration for having access to the information contained therein, I release BCPS, its Board of Education, individual Board members, administrative employees and agents, the Internet provider and its operators from any and all claims of any nature arising from my use, or inability to use, the Technology Resources. I agree to abide by this Acceptable Use Policy and Agreement and by any rules or regulations that may be added from time-to-time by BCPS and its Internet provider as well as BCPS's Internet Safety Policy and its Student Code of Conduct. All additional rules, regulations, and policies are available in hardcopy in the Principal's office.

I have read this Acceptable Use Policy and Agreement and sign it knowingly and freely.

Student Signature

Date

As the student's parent or legal guardian, I acknowledge that I have read this Acceptable Use Policy and Agreement. In consideration for the privilege of my child using BCPS Technology Resources, I hereby release and covenant not to sue BCPS, its Board of Education, individual Board of Education members, and its administrative employees and agents for any and all claims, causes of action, and damages of any nature arising from my child's use of, or inability to use, BCPS's Technology Resources. I agree to pay for, reimburse and indemnify BCPS, its Board of Education, individual Board members, administrative employees and agents for damages including any fees, expenses, liability or other damages of every sort and nature incurred as a result of my child's use, or misuse, of these Technology Resources.

I also authorize BCPS to consent to the sharing of information about my child to BCPS authorized website operators as necessary to enable my child to participate in any program, course, or assignment requiring such consent under the Children's Online Privacy and Protection Act. I understand and agree that my child will not be able to use BCPS Technology Resources until this Agreement has been signed by both my child and me.

I have read this Acceptable Use Policy and Agreement and sign it knowingly and freely:



**BOARD OF EDUCATION
BATTLE CREEK PUBLIC SCHOOLS**

PROPERTY

**Acceptable usage policy and
Agreement for Acceptable Use of BCPS Technology Resources
*Employees, Board Members, Persons other than Students***

_____ *Building/Program Name* _____ *Name*

This agreement is entered into this _____ day of _____, 20____, between _____ (“Employee” or “User”) and Battle Creek Public Schools (“BCPS”). The purpose of this agreement is to grant access to and define acceptable use of BCPS's Technology Resources for legitimate educational purposes consistent with BCPS’s mission statement. “Technology Resources” include, but are not limited to: (1) internal and external network infrastructure, (2) Internet and network access, (3) computers, (4) servers, (5) storage devices, (6) peripherals, (7) software, and (8) messaging or communication systems. These resources may be provided to users to: (1) assist in the collaboration and exchange of information, (2) facilitate personal growth in the use of technology, and (3) enhance information gathering and communication skills.

In exchange for the use of BCPS’s Technology Resources either at school or away from school, you understand and agree to the following:

1. Your use of the BCPS’s Technology Resources is a privilege that may be revoked by the BCPS at any time and for any reason.
2. The BCPS reserves all rights to any material stored on BCPS Technology Resources. You have no expectation of privacy when using BCPS Technology Resources. BCPS reserves the right to monitor all use of its Technology Resources, including, without limitation, personal email and voice mail communications, computer files, data bases, web logs, audit trails, or any other electronic transmissions accessed, distributed, or used through the Technology Resources. BCPS also reserves the right to remove any material from the Technology Resources that the BCPS, at its sole discretion, chooses to, including, without limitation, any information that BCPS determines to be unlawful, obscene, pornographic, harassing, intimidating, or disruptive.

3. The Technology Resources do not provide you a "public forum." You may not use the Technology Resources for commercial purposes or to lobby or solicit political positions or candidates unless expressly authorized in advance by a supervisor as part of a BCPS activity. You may, however, use the Technology Resources to contact or communicate with public officials.
4. BCPS's Technology Resources are intended for exclusive use by registered users. You are responsible for your account/password and any access to the Technology Resources made using your account/password. Any problems arising from the use of your account/password are your responsibility. Use of your account by someone other than you is forbidden and may be grounds for loss of access privileges and other disciplinary consequences (for employees, up to and including termination), as determined by BCPS, for both you and the person(s) using your account/password,
5. You may not use the Technology Resources or any other communication/messaging devices (including devices not owned by BCPS) to engage in cyberbullying. Cyberbullying means "the use of email, cell phone and pager text messages, instant messaging (IM), defamatory personal websites, and defamatory online personal polling websites to support deliberate, repeated and hostile behavior by an individual or group that is intended to harm others." [Definition written by Bill Belsy, available at <http://www.cyberbullying.ca>.]
6. Misuse of Technology Resources may result in suspension of your account privileges and/or other disciplinary action (for employees, up to and including termination), as determined by BCPS. Misuse, includes, but is not limited to:
 1. Accessing or attempting to access educationally inappropriate materials/sites, including, without limitation, material that is unlawful, obscene, pornographic, profane, or vulgar. The determination of a material's "appropriateness" is based on both the material's content and intended use.
 2. Cyberbullying (as defined in paragraph E) or any other use of the Technology Resources that would violate BCPS's anti-bullying rules or policies. Cyberbullying may, without limitation, include posting slurs or rumors or other disparaging remarks about another person on a website; sending email or instant messages that are meant to threaten, harass, intimidate, or drive up a victim's cell phone bill; taking or sending embarrassing or sexually explicit photographs, video, or other visual depictions of another person; or posting misleading or fake photographs of others on websites.
 3. Sexting, which includes, without limitation, possessing, sending, or distributing nude, sexually explicit, or sexually suggestive photographs, videos, or other visual depictions of yourself or another person over the BCPS's Technology Resources from any means, including over personally owned devices.
 4. Vandalism, which includes, without limitation, any malicious or intentional attempt

to harm, steal, destroy, or disrupt user data, school materials, or school hardware; violating the integrity of BCPS's Technology Resources; uploading or creating viruses; downloading/installing unapproved, illegal, or unlicensed software; or seeking to circumvent or bypass security measures.

5. Hacking, which includes, without limitation, gaining or attempting to gain access to, modifying, or obtaining copies of, unauthorized information or information belonging to other users.
 6. Unauthorized copying or use of licenses or copyrighted software.
 7. Plagiarizing, which includes the unauthorized distributing, copying, using, or holding out as your own, copyrighted material (most of the Internet is copyrighted), or material written by someone else, without permission of, and attribution to, the author.
 8. Misrepresenting others, including, without limitation, posting confidential or inappropriate information (text, video, photo) meant to harass, intimidate, or embarrass other students or staff on any social media network or website.
 9. Allowing anyone else to use an account or not locking access to computer devices when leaving them unattended.
 10. Using or soliciting the use of, or attempting to use or discover the account information or password of, another user.
 11. Attempting to or successfully disabling security features, including technology protection measures required under the Children's Internet Protection Act (CIPA).
 12. Misusing equipment or altering system software without permission.
 13. Commercial for-profit activities, advertising, political lobbying, or sending mass mailings or spam. However, you may contact a public official to express an opinion on a topic of interest.
 14. Using the Technology Resources in any way that violates any federal, state, or local law or rule (including the BCPS's employee code of conduct for employees)
1. It is the policy of BCPS, as a recipient of certain federal funds, to monitor the online activities of its minor students and provide technology protection measures on its computers with Internet access designed to prevent minors from accessing visual depictions that are (1) obscene, (2) child pornography, or (3) harmful to minors. BCPS staff must regularly monitor to ensure that technology blocks are working appropriately. The technology blocks may be disabled by an authorized person, *during adult use*, to enable access to bona fide research or for other lawful purposes.
 2. BCPS does not warrant or guarantee that its Technology Resources will meet any specific requirement, or that they will be error free or uninterrupted; nor will BCPS or its Internet provider 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 Technology Resources.

3. When utilizing the BCPS Technology Resources, you may use only BCPS authorized messaging and communication systems, which include, to a limited extent, personal email accounts. There is no expectation of privacy in electronic communications when using Technology Resources. BCPS reserves the right to monitor electronic communications.
4. As soon as possible, you must disclose to your supervisor any message you receive from a colleague or student that is inappropriate or makes you feel uncomfortable, harassed, threatened, or bullied, especially any communication that contains sexually explicit content. You should not delete such content until instructed to do so by the Human Resources Department.
5. Any violation of this Acceptable Usage Policy or inappropriate use of BCPS technology while accessing personal communication accounts will subject the user to discipline, including the possible termination of access to Technology Resources and for employees including the possibility of termination from the BCPS as an employee
6. BCPS and/or the Internet provider will periodically determine whether specific uses of the BCPS's Technology Resources are consistent with this acceptable-use policy. BCPS or its Internet provider reserves the right to log Internet use and to monitor mail space and file server utilization by users. BCPS reserves the right to remove a user account on the BCPS's Technology Resources to prevent further unauthorized activity.
7. You may not transfer intellectual property or software belonging to BCPS without the permission of the BCPS's Technology Supervisor or his/her designee. Without first obtaining such permission, you will be liable for any damages and will be required to pay the cost of any damages caused by such transfer, whether intentional or accidental.
8. You are responsible for the proper use of Technology Resources and will be held accountable for any damage to or replacement of the Resources caused by your inappropriate use.
9. You acknowledge that you may receive or have access to student education records and other data subject to confidentiality requirements of the Family Educational Rights and Privacy Act ("FERPA"), 20 USC § 1232g, Individuals with Disabilities Education Act ("IDEA"), the Michigan Mandatory Special Education Act ("MMSEA"), and the National School Lunch Act and their underlying regulations (collectively, the "Acts"). You acknowledge that, to the extent you receive and have access to such data and records, you are subject to the provisions of those Acts and their regulations, and will not re-disclose student data or other education records except as permitted by law.
10. The user is solely responsible for all charges and fees, including outside telephone, printing, and merchandise purchases made through the network. BCPS is not a party to such transactions and shall not be liable for any costs or damages, whether direct or indirect, arising out of network transactions by the user.

11. The user acknowledges and understands that correspondence sent or received over the BCPS's network may be subject to retrieval under the State of Michigan Freedom of Information Act, MCL 15.231 – 246. The user agrees to cooperate fully and promptly with the BCPS when responding to FOIA requests concerning communications over the BCPS's computer network.

In consideration for the privileges of using the BCPS's Technology Resources and in consideration for having access to the information contained therein, I release BCPS, its Board of Education, individual Board members, administrative employees and agents, the Internet provider and its operators from any and all claims of any nature arising from my use, or inability to use, the Technology Resources. I agree to abide by this Acceptable Use Policy and Agreement and by any rules or regulations that may be added from time-to-time by BCPS and its Internet provider as well as BCPS's Internet Safety Policy. All additional rules, regulations, and policies are available in the Human Resource office. I agree to pay for, reimburse and indemnify BCPS, its Board of Education, individual Board members, administrative employees and agents for damages including any fees, expenses, liability or other damages of every sort and nature incurred as a result of my use, or misuse, of these Technology Resources.

I have read this Acceptable Use Policy and Agreement of Acceptable Use of Technology Resources and sign it knowingly and freely.

Employee Signature

Date

Please initial if you give permission:

_____ I give permission for my photo and name to be published on web pages.

Revised: July 2010

cc: Employee file