COVER PAGE

Description of District – SECTION 1

1. **District/school name:** Black River Public School
2. **Address:** 491 Columbia Ave. Holland, MI 49423
3. **Phone number:** 616.355.0055
4. **District/school code number:** 70904 Building 8331
5. **Head of School:** Shannon Brunink
6. **Technology Director:** Caleb Fisher
7. **Date Plan Created:** June 2014
8. **Start date of plan (month, year):** July 1, 2014
9. **End date of plan (month, year):** June 30, 2017
10. **Contact person:** Caleb Fisher, 616.355.0055 x 130 FAX: 616.355.0057
    Email: fisherc@brpsk12.org
11. **Intermediate School District name:** Ottawa Area ISD
12. **Team Members**: James Levering, Elementary teacher; David Kibler, Parent; Tom Guarr; Mike Ellis; Shannon Brunink, School Leader; Ian Mcknight & Joey Heneghan, student representatives; James Horn, Technology Support Specialist; Caleb Fisher, Technology teacher & Director. Team members volunteer as representatives on the committee.
13. **The URL for the location of the technology plan on the web:** http://www.blackriverpublicschool.org/techplan2014.pdf

Contents

Introductory Material – SECTION 2

Black River is a Public Charter School chartered by Grand Valley State University. We presently have about 860 students in grades K – 12. We are located at one site, 491 Columbia Avenue, Holland, MI. This location puts the school in the core of the city of Holland, a city with 35,000 residents. Our students are drawn from the city and surrounding communities; a few coming from cities twenty or more miles away. Nineteen percent of our students currently receive free or reduced lunch. Our students' ethnicity is as follows:

	American Indian	Asian	Black	Pacific Islander	White	Hispanic	Multi - Racial	Total
Number	2	39	12	1	661	121	26	862
Percentage	0.2%	4.5%	1.4%	0.1%	76.7%	14%	3%	100%

data from 2014 EOY count

We have approximately sixty teachers and five buildings at one site: a Kindergarten building, 1-3 modular building, a 4-5 modular building, a 6-12 building and a

gymnasium/cafeteria/ Performing Arts building. Because we are near capacity, for the past three years our total enrollment has grown by approximately 1-3% each year. At present we do not anticipate significant growth in grades 6-12; grades K-5 might grow if we are able to construct a permanent elementary school building.

Mission Statement

Our mission is to prepare each student for college and for life through a challenging curriculum that accommodates individual learning styles. We want to have our students discover responsibility for their own lives as well as empathy for all people and cultures. Through a deep respect for independent thinking, we strive to guide our students in their personal growth toward a genuine self-knowledge so they can achieve their full human potential.

Beliefs

- We believe the school's responsibility in education is to bring curiosity, challenge, pleasure and a sense of accomplishment into our student's lives.
- We believe it is through commitment and determination that students stretch the limits of their minds in the joy and celebration of learning.
- We believe education must not be a race for the accumulation of facts, but should provide the basic tools and ideas for learning so that education will be an enriching end in itself.
- We believe certain skills to be essential for all of our graduates: To read well, to write clearly and coherently, to study effectively, to reason soundly, and to question thoughtfully and creatively.

Curriculum

- Our Core Curriculum will be English, foreign language, mathematics, history and politics, natural sciences, the arts and applied technology. All courses will be taught within an integrated curriculum, demonstrating relationships among the fields of study.
- Students will experience a progression of learning based not on chronological age, but on understanding.
- Our students will be provided with non-language-based processes for intuitive insight and the development of meaning, in addition to rational academic processes.

Culture

- To succeed in our mission, we need the students' and parents' active partnership and agreement with the School Mission, which includes a personal commitment to serious academic challenge.
- The atmosphere of the school is that of a safe place in which students feel free to develop individual ideas and styles. Our faculty stresses unanxious expectations; making errors is a necessary part of the learning process.
- The culture of our school is one of mutually respectful interaction between adults and students; we recognize the need of living enlightened and humane lives.
- We encourage a student population of social, economic and racial diversity.
- We will be an Elementary School of grades K- 5, a Middle School of grades 6, 7 and 8 and an Upper School of grades 9, 10, 11 and 12; the school will strive for a small population of

students of approximately 560 in grades 6-12, and classes will be targeted to be an average class size of 20.

Methods

- Our faculty members include academic coaches, providing academic leadership as well as guidance toward learning and personal growth. We embrace the Socratic Method and experiential learning as primary pedagogical tools.
- Students will acquire the knowledge and skills needed to make personal decisions leading toward physical and emotional well-being.
- There will be a clear disciplinary code for all students.
- Everything taught at our school endeavors to be a life-long skill, whether it be literary, linguistic, athletic, artistic, scientific, mathematical or historical.

Vision and Goals – SECTION 3

Technology Mission Statement

Black River Public School will establish a creative learning environment for students to gain literacy in necessary technological skills so they are confident and adaptable contributors to our computer driven society. Black River Public School is committed to a compelling multiyear, efficient, and cost-effective plan for the use of technology in every learning environment. Technology enhances the School mission and supports and unifies instructional and administrative functions, maximizing the individual potential of students and the effectiveness of staff. To succeed in all of this, proper professional development is essential. Teachers and staff must be trained with updated technology and best practices through workshops. We must also assess how well the district's technology goals and objectives are being met.

Our Mission, *"To Prepare Students for College and Life*", is very broad. The later part requires us to determine what knowledge and skills colleges expect. Using technology is one skill expected but skills and the level expected are constantly changing. Skill and the ability to adapt are becoming more and more important than factual knowledge. Because our school focuses on "project based learning," we tend to emphasize skills more than knowledge.

One of our current foci is to increase inquiry learning in science. We are hoping to purchase more probes and instrumentation to record and manipulate data from experiments. Some of the devices link to computers, calculators. They allow science students to focus on the skills of data analysis and modeling as opposed to recording data.

Students and staff will use online collaboration tools to produce spreadsheets, word-processed documents, presentations, calendar, web pages, photo/video/art and blogs as part of the curriculum. We plan to make these tools available to every student on any Internet connected computer.

See section 11 for specific hardware/software needs.

Curriculum Integration – SECTION 4

We do not offer any required classes that focus on technology or the technology standards. Technology learning takes place within the curriculum of regular classes and may be enhanced in the elective classes taken by some students. We recently implemented an "Accelerated Math" program that allows us to test students and then create customized assignments based on the test results. The process uses a card scanner so that teachers can easily use it with little training and only a small time commitment.

The Michigan Standards were revised in 2010. Departments are working on updating our curriculum to integrate many of the new or revised standards. Some of the standards are not specifically taught but are acquired by the students through general technology use, both hardware and software.

Michigan Educational Technology Standards 2010	BRPS Curriculum
Grades PK through 2 –Technology Standards and Expectations – (prior to completing Grade 2)	
PK_2.CI Creativity and Innovation - By the end of Grade 2 each student will:	
1. use a variety of digital tools (e.g., word processors, drawing tools, simulations, presentation software, graphical organizers) to learn, create, and convey original ideas or illustrate concepts	We plan to increase technology use in Grades K-2 by adding at least one computer to each classroom and adding a projector to any classroom without one.
PK_2.CC. Communication and Collaboration - By the end of Grade 2 each student will:	
1. work together when using digital tools (e.g., word processor, drawing, presentation software) to convey ideas or illustrate simple concepts relating to a specified project	Students perform an online Fish Dissection.
2. use a variety of developmentally appropriate digital tools (e.g., word processors, paint programs) to communicate ideas to classmates, families, and others	
PK_2.RI. Research and Information Fluency - By the end of Grade 2 each student will:	
1. interact with internet based resources	K-2 students use "Accelerated Reader" to track and evaluate their reading.
2. use digital resources (e.g., dictionaries, encyclopedias, graphs, graphical organizers) to locate and interpret information relating to a specific curricular topic, with assistance from teachers, school library media specialists, parents, or student partners	
PK_2.CT. Critical Thinking, Problem Solving, and Decision Making - By the end of Grade 2 each student will:	
1. explain ways that technology can be used to solve problems (e.g., cell phones, traffic lights, GPS units)	

2. use digital resources (e.g., dictionaries, encyclopedias, search engines, web sites) to solve developmentally appropriate problems, with assistance from teachers, parents, school media specialists, or student partners	
PK_2.DC. Digital Citizenship - By the end of Grade 2 each student will:	
1.describe appropriate and inappropriate uses of technology (e.g., computers, internet, e-mail, cell phones) and describe consequences of inappropriate uses	
2. know the Michigan Cyber Safety Initiative's three rules (Keep Safe, Keep Away, Keep Telling)	Counselor led lessons on safety
3. identify personal information that should not be shared on the Internet (e.g. name, address, phone number)	
4. know to inform a trusted adult if they receive or view an online communication which makes them feel uncomfortable, or if someone whom they don't know is trying to communicate with them or asking for personal information	
PK_2.TC. Technology Operations and Concepts - By the end of Grade 2 each student will:	
1. discuss advantages and disadvantages of using technology	
2. be able to use basic menu commands to perform common operations (e.g., open, close, save, print)	• All K-2 students use Accelerated Reader online to track their reading and comprehension; this involves entering data, taking online quizzes and saving or printing reports. This is done weekly and is even available in the summer. • Many also use the Accelerated Math program.
3. recognize, name, and label the major hardware components in a computer system (e.g., computer, monitor, keyboard, mouse, printer)	
4. discuss the basic care for computer hardware and various media types (e.g., CDs, DVDs, videotapes)	
5. use developmentally appropriate and accurate terminology when talking about technology	
6. understand that technology is a tool to help him/her complete a task, and is a source of information, learning, and entertainment	
7. demonstrate the ability to navigate in virtual environments (e.g., electronic books, games, simulation software, web sites)	

Grades Three through Five – Technology Standards and Expectations	
3_5.CI. Creativity and Innovation - By the end of Grade 5 each student will:	
1. produce a media-rich digital project aligned to state curriculum standards (e.g., fable, folk tale, mystery, tall tale, historical fiction)	• 5th Grade Planet Brochure (Students research a planet and create a brochure to "sell" their planet using Publisher

2. use a variety of technology tools and applications to demonstrate their creativity by creating or modifying works of art, music, movies, or presentations	• Monthly research Projects (Research using books and various search engines, typing up a 1-2 page report or summary) • 5th Grade Math Dictionary (Students use dictionaries and websites to define and illustrate over 100 relevant vocabulary words that they will encounter in Math throughout the year. The students type these up and print them out in book form.)
3. participate in discussions about technologies (past, present, and future) to understand these developments are the result of human creativity	
3_5.CC. Communication and Collaboration - By the end of Grade 5 each student will:	
1. use digital communication tools (e.g., e-mail, wikis, blogs, IM, chat rooms, videoconferencing, Moodle, Blackboard) and online resources for group learning projects	• Students use Movie Maker to make their poems and stories come to life. They typically do this on the laptops. • Writer's Workshop (Teachers are able to brainstorm aloud as they demonstrate strong writing skills while students watch the projection screen. Students can write in their journals as teacher types, edits, and revises work. Students also work through the writing process, write several long stories, type them and publish them.)
2. identify how different software applications may be used to share similar information, based on the intended audience (e.g., presentations for classmates, newsletters for parents)	
3. use a variety of media and formats to create and edit products (e.g., presentations, newsletters, brochures, web pages) to communicate information and ideas to various audiences	• All 4-5 students take a keyboarding class that also explores the use of additional software tools.
3_5.RI. Research and Information Fluency - By the end of Grade 5 each student will:	
1. identify search strategies for locating information with support, from teachers and school library media specialists	Students in grades 4 and 5 have a weekly class that builds skills in: • Keyboarding • Word Processing Skills • Power Point • Publisher • Safety on the Internet • Using Search Engines • Saving/Sharing Files
2. use digital tools to find, organize, analyze, synthesize, and evaluate information	
3. understand and discuss that web sites and digital resources may contain inaccurate or biased information	
4. understand that using information from a single internet source might result in the reporting of erroneous facts and that multiple sources should always be researched	
3_5.CT. Critical Thinking, Problem Solving, and Decision Making - By the end of Grade 5 each student will:	

1. use digital resources to access information that can assist them in making informed decisions about everyday matters (e.g., which movie to see, which product to purchase)	5th Grade Chautauqua (Students research a notable person in the early 20th century, memorize a 10 minutes speech, dress in costume and share their life with the class. We've used the projectors to create backdrops appropriate for each speaker.)
2. use information and communication technology tools (e.g., calculators, probes, videos, DVDs, educational software) to collect, organize, and evaluate information to assist with solving problems	
3. use digital resources to identify and investigate a state, national, or global issue (e.g., global warming, economy, environment)	
3_5.DC. Digital Citizenship- By the end of Grade 5 each student will:	
1. discuss scenarios involving acceptable and unacceptable uses of technology (e.g., file-sharing, social networking, text messaging, cyber bullying, plagiarism)	Keyboarding Class Lesson Lessons taught by Counselor
2. recognize issues involving ethical use of information (e.g., copyright adherence, source citation)	
3. describe precautions surrounding personal safety that should be taken when online	
4. identify the types of personal information that should not be given out on the Internet (name, address, phone number, picture, school name)	
3_5.TC. Technology Operations and Concepts- By the end of Grade 5 each student will:	
1. use basic input and output devices (e.g., printers, scanners, digital cameras, video recorders, projectors)	Each 4-5 classroom has a projector that students and teachers use to display documents. Some classrooms have a scanner and digital cameras are used to document and display student work.
2. describe ways technology has changed life at school and at home	
3. understand and discuss how assistive technologies can benefit all individuals	Students with IEP's have access to technology appropriate to their disability.
4. demonstrate proper care in the use of computer hardware, software, peripherals, and storage media	
5. know how to exchange files with other students using technology (e.g., network file sharing, flash drives)	Most students use Google docs, Windows online or email files to share documents.

Grades Six through Eight – Technology Standards and Expectations	
6_8.CI. Creativity and Innovation – By the end of Grade 8 each student will:	
1. apply common software features (e.g., spellchecker, thesaurus, formulas, charts, graphics, sounds) to enhance communication with an audience and to support creativity	This is part of regular classroom reports and presentations.

2. create an original project (e.g., presentation, web page, newsletter, information brochure) using a variety of media (e.g., animations, graphs, charts, audio, graphics, video) to present content information to an audience	We offer a number of experiential activities trips during our project term. A presentation is required for each course. Students create photo galleries, videos, brochures etc. detailing the activities.
3. illustrate a content-related concept using a model, simulation, or concept-mapping software	This special software in at presently only used by a few students, usually those with an IEP.
6_8.CC. Communication and Collaboration – By the end of Grade 8 each student will:	
1. use digital resources (e.g., discussion groups, blogs, podcasts, videoconferences, Moodle, Blackboard) to collaborate with peers, experts, and other audiences	We have not had the capacity to use these resources extensively. We are working on increasing capacity as part of this plan.
2. use collaborative digital tools to explore common curriculum content with learners from other cultures	
3. identify effective uses of technology to support communication with peers, family, or school personnel	
6_8.RI. Research and Information Fluency – By the end of Grade 8 each student will:	
1. use a variety of digital resources to locate information	Middle school students use "Career Cruising" to identify their career interests as part of their I-search paper in English class. They also use other online resources and word-processing to produce this paper.
2. evaluate information from online resources for accuracy and bias	
3. understand that using information from a single internet source might result in the reporting of erroneous facts and that multiple sources should always be researched	
4. identify types of web sites based on their domain names (e.g., edu, com, org, gov, net)	
5. employ data-collection technologies (e.g., probes, handheld devices, GPS units, geographic mapping systems) to gather, view, and analyze the results for a content-related problem	All 6-12 students science use Vernier Labquests or Netbook computers with appropriate probes in science labs. Upper Level students also use Video analysis and mathematical modeling to describe physical phenomena.
6_8.CT. Critical Thinking, Problem Solving, and Decision Making - By the end of Grade 8 each student will:	
1. use databases or spreadsheets to make predictions, develop strategies, and evaluate decisions to assist with solving a problem	6th and 8th grade social studies use online resources to collect and categorize data on various countries and political systems
2. evaluate available digital resources and select the most appropriate application to accomplish a specific task (e, g., word processor, table, outline, spreadsheet, presentation program)	
3. gather data, examine patterns, and apply information for decision making using available digital resources	
4. describe strategies for solving routine hardware and software problems	Students are expected to solve routine printer and computer hardware (loose connections) and software problems in the computer lab

6_8.DC. Digital Citizenship – By the end of Grade 8 each student will:	
1. provide accurate citations when referencing information sources	All 6-12 students write research papers. Most papers require a variety of sources that must include digital and non-digital (interview, print etc.). English teachers require HS papers meet MLA guidelines. We subscribe to the online version of the MLA guidelines. A bibliography is required for all research papers.
2. discuss issues related to acceptable and responsible use of technology (e.g., privacy, security, copyright, plagiarism, viruses, file-sharing)	
3. discuss the consequences related to unethical use of information and communication technologies	
4. discuss possible societal impact of technology in the future and reflect on the importance of technology in the past	
5. create media-rich presentations for other students on the appropriate and ethical use of digital tools and resources	Students create Power Points, videos, or similar presentations in social studies classes
6. discuss the long term ramifications (digital footprint) of participating in questionable online activities (e.g., posting photos of risqué poses or underage drinking, making threats to others)	This is part of our College Advisory Program class.
7. describe the potential risks and dangers associated with online communications	
6_8.TC. Technology Operations and Concepts - By the end of Grade 8 each student will:	
1. identify file formats for a variety of applications (e.g., doc, xls, pdf, txt, jpg, mp3)	
2. use a variety of technology tools (e.g., dictionary, thesaurus, grammar-checker, calculator) to maximize the accuracy of technology-produced materials	All 6-12 students write research papers; available technology tools are used to process these papers.
3. perform queries on existing databases	
4. know how to create and use various functions available in a database (e.g., filtering, sorting, charts)	
5. identify a variety of information storage devices (e.g., CDs, DVDs, flash drives, SD cards) and provide rationales for using a certain device for a specific purpose	
6. use accurate technology terminology	
7. use technology to identify and explore various occupations or careers, especially those related to science, technology, engineering, and mathematics	All 6-12 students are enrolled in our College Advisory Program. As part of the program, students use the Internet to research and match their interests to careers. They check their grades and assignments using the Infinite Campus portal. The juniors and seniors research colleges, practice college applications and then prepare and submit college applications. Middle school students use "Career Cruising" to identify their career interests as part of their I-search paper in English class. They also use other online resources and word-processing to produce this paper.
8. discuss possible uses of technology to support personal pursuits and lifelong learning	

9. understand and discuss how assistive technologies can benefit all individuals	
10. discuss security issues related to e-commerce	

Grades Nine through Twelve – Technology Standards and Expectations	
9_12.CI. Creativity and Innovation – By the end of Grade 12 each student will:	
1. apply advanced software features (e.g. built-in thesaurus, templates, styles) to redesign the appearance of word processing documents, spreadsheets, and presentations	All 6-12 students write research papers; available technology tools are used to process these papers.
2. create a web page (e.g., Dreamweaver, Google)	This will be implemented when we give students Google accounts
3. use a variety of media and formats to design, develop, publish, and present projects (e.g., newsletters, web sites, presentations, photo galleries)	
9_12.CC. Communication and Collaboration - By the end of Grade 12 each student will:	
1. identify various collaboration technologies and describe their use (e.g., desktop conferencing, listserv, blog, wiki)	
2. use available technologies (e.g., desktop conferencing, e-mail, videoconferencing, instant messaging) to communicate with others on a class assignment or project	
3. collaborate in content-related projects that integrate a variety of media (e.g., print, audio, video, graphic, simulations, and models)	
4. plan and implement a collaborative project using telecommunications tools (e.g., ePals, discussion boards, online groups, groupware, interactive web sites, videoconferencing)	We offer a number of experiential activities trips during our project term. A presentation is required for each course. Students create photo galleries, videos, brochures etc. detailing the activities.
5. describe the potential risks and dangers associated with online communications	
6. use technology tools for managing and communicating personal information (e.g., finances, contact information, schedules, purchases, correspondence)	This will be implemented when we give students Google accounts
9_12.RI. Research and Information Fluency – By the end of Grade 12 each student will:	
1. develop a plan to gather information using various research strategies (e.g., interviews, questionnaires, experiments, online surveys)	Science students gather information using online resources, data probes, and direct measurements.
2. identify, evaluate, and select appropriate online sources to answer content related questions	All English 10-12 students choose and evaluate internet sources to determine whether they are appropriate for a research based paper on human rights. They compare data from a number of sources. They write this paper as well as other papers
3. demonstrate the ability to use library and online databases for accessing information (e. g. MEL, Proquest, Infosource, United Streaming)	

4. distinguish between fact, opinion, point of view, and inference	using various online databases and library databases at our local library.
5. evaluate information found in selected online sources on the basis of accuracy and validity	
6. evaluate resources for stereotyping, prejudice, and misrepresentation	
7. understand that using information from a single internet source might result in the reporting of erroneous facts and that multiple sources must always be researched	All HS Social Studies Classes use technology to enhance their reports and classroom activities.
8. research examples of inappropriate use of technologies and participate in related classroom activities (e.g., debates, reports, mock trials, presentations)	
9_12.CT. Critical Thinking, Problem Solving, and Decision Making - By the end of Grade 12 each student will:	
1. use digital resources (e.g., educational software, simulations, models) for problem solving and independent learning	All students develop skill using a graphic calculator starting in grade six and continuing in all math courses through Calculus.
2. analyze the capabilities and limitations of digital resources and evaluate their potential to address personal, social, lifelong learning, and career needs	
3. devise a research question or hypothesis using information and communication technology resources, analyze the findings to make a decision based on the findings, and report the results	Some upper level Social Studies classes such as AP US History.
9_12.DC. Digital Citizenship – By the end of Grade 12 each student will:	
1. identify legal and ethical issues related to the use of information and communication technologies (e.g., properly selecting, acquiring, and citing resources)	English classes emphasize this as a part of the MLA format for papers.
2. discuss possible long-range effects of unethical uses of technology (e.g., virus spreading, file pirating, hacking) on cultures and society	
3. discuss and demonstrate proper netiquette in online communications	
4. identify ways that individuals can protect their technology systems from unethical or unscrupulous users	
5. create appropriate citations for resources when presenting research findings	This is done in English classes; students are required to follow MLA guidelines on papers.
6. discuss and adhere to fair use policies and copyright guidelines	
9_12.TC. Technology Operations and Concepts - By the end of Grade 12 each student will:	
1. complete at least one online credit, or non-credit, course or online learning experience	The textbook and text resources for Pre-Calculus course are online; students access at home and using netbooks at school. At present 15 students are taking online classes through MIVU. Other online experiences are

	integrated into the regular curriculum.
2. use an online tutorial and discuss the benefits and disadvantages of this method of learning	Spanish students use online resources to prepare for the National Spanish Exam and then take the exam online. Other courses could use similar online instructional resources if we had more access to computers.
3. explore career opportunities, especially those related to science, technology, engineering, and mathematics and identify their related technology skill requirements	All 6-12 students are enrolled in our College Advisory Program. As part of the program, students use the Internet to research and match their interests to careers. They check their grades and assignments using the Infinite Campus portal. The juniors and seniors research colleges, practice applications and then prepare and submit college applications.
4. describe uses of various existing or emerging technology resources (e.g., podcasting, webcasting, videoconferencing, online file sharing, global positioning software)	Most students have IPods, digital music players and/or smart phones; many also have GPS on their phone or in their car.
5. identify an example of an assistive technology and describe its purpose and use	
6. participate in a virtual environment as a strategy to build 21st century learning skills	• Upper level Physics and Math students use Java Simulations as part of the curriculum. These are often virtual labs and interactive simulations. Students in project term create a virtual world using the programming environment "Alice". • Science students use a number of online simulations to support learning in Biology, Earth Science, Physics and Chemistry.
7. assess and solve hardware and software problems by using online help or other user documentation	Students are asked to solve routine software problems using the built-in "help" available on most programs.
8. explain the differences between freeware, shareware, open source, and commercial software	
9. participate in experiences associated with technology-related careers	
10. identify common graphic, audio, and video file formats (e.g., jpeg, gif, bmp, mpeg, wav, wmv, mp3, flv, avi, pdf)	
11. understand and discuss how assistive technologies can benefit all individuals	
12. demonstrate how to import/export text, graphics, or audio files	Students regularly copy/paste, files or sections of files from document to document. They also imbed audio or graphics in documents.
13. proofread and edit a document using an application's spelling and grammar checking functions	All MS/HS students produce word-processed documents that have been formatted in a recommended style and digitally checked for spelling and grammar.

We plan to offer Google or similar accounts to all upper level students (and later to all 4-12 students)to improve computer literacy. Each student will have access to collaboration tools as well. Teachers will be trained and will use these tools in the curriculum. Students will be expected to produce and collaborate on online documents for their classes. This will fill in many of the gaps in the above chart.

Our curriculum director and technology director work with team leaders and department to look at new ways to integrate technology into the curriculum. As part of this process the group looks at State technology goals and standards, ideas that staff have gotten from conferences, courses, or workshops and seeks ways to integrate new strategies for teaching and learning with technology into our curriculum. This may involve seeking additional technology resources.

Student Achievement – SECTION 5

*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 that integration. **Required by NCLB Legislation.*

We test all elementary, middle school and low achieving HS students using an online testing system from NWEA. Students are presently tested at least two times a year in reading and math using an adaptive test and are evaluated according to Michigan and national standards.

Each year we incorporate more technology into the curriculum. We can do more as the ratio of computers to students (presently about 1:5) improves. Most of our computers are used at least 80% of the school day. Logistics prevents usage significantly higher than the 80%.

Since 2011 we offer Google accounts to all upper level students to all 4-12 students) to improve computer literacy. Each student will have access to collaboration tools as well. Teachers will be trained and will use these tools in the curriculum. Students will be expected to produce and collaborate on online documents for their classes. This will allow us to fill in many of the gaps in our technology curriculum

We recently implemented an “Accelerated Math” program that allows us to teats students and then create customized assignments based on the test results. The process uses a card scanner so that teachers can easily use it with little training and only a small time commitment.

See also Section 4 Curriculum Integration and the table in section 11Infrastructure Needs/Technical Specification, and Design.

Technology Delivery – SECTION 6

*Strategies for the delivery of specialized or rigorous courses and curricula through the use of technology, including distance learning technologies. **Required by NCLB Legislation.*

Students are presently tested (using an online testing system from NWEA) at least two times a year in reading, math and language arts using an adaptive test according Michigan and/or national standards. Teachers also use Accelerated Math to adapt learning activities to the student. Teachers use and will continue to the NWEA and Accelerated math systems to produce instructional materials that target each individual students weak areas. These materials are produced by the software and customized to address the grade level standards for the individual student.

We have about 15 students presently taking online classes through MIVU or other providers.

Parental Communications & Community Relations – SECTION 7

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

We will continue to use our Student/Parent Portal for lunch accounts, academic reporting, assignments, and attendance. We may expand its use to include reports of behavior, standardized and pre-college testing. We will implement an online payment system for lunch and fees within a few months. We continue to maintain a website and Web calendars for parent and student communication. We publish and online newsletter that is also available in hard copy by request. Over the past few years we have steadily reduced our use of paper for communications and reporting.

The approved technology plan will be presented to the school board at a public meeting and published on our web site. References to the plan and examples of technology use are and will continue to be published in our school newsletter, The Ripples, and individual classroom newsletters which are published online for every class monthly. Members of the community are part of the Technology Planning Team (see section Description of District on page 1).

The two parents on the Technology Planning Team continue to be involved in the implementation of the plan. One of the parents is very active in our school and has already met with the Head of school concerning the plan and funding for technology. The other is a board member who must approve funding for the plan and also expects reports from the committee on implementation and progress. Our Parent Organization has assisted with funding some elements of our past plans using funds they have raised in the community. For example, the Parent Organization purchased 12 netbooks and Vernier probes for the science department in 2009 and 15 netbooks for elementary classrooms in 2010. I assume that their assistance will continue. Many school departments present needs to this organization; the organization distributes available funds among worthy projects.

Required Element: E. Collaboration – SECTION 8

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

Not applicable. We do not have any adult literacy programs at our charter school. Other public schools and our ISD, OAISD, have adequate programs for our area.

Professional Development – SECTION 9

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

We begin each school year with several days of teacher workshops and meetings to ensure all staff are trained to use the tools available in our classrooms and labs. Individual departments also have meetings and training sessions throughout the year. These departmental meetings focus on curriculum and using technology in the curriculum. In addition to the Michigan curriculum standards, departments have been made aware of the Michigan standards for staff through on online survey that teachers are presently completing so that we can report the number of staff competent in the use of technology as required by the State.

August 2014	Introductory training on new features and enhancements of our internal network hardware and/or software as well as enhancements of Infinite Campus for all staff and a full Infinite Campus training for new staff.
2014 Fall	Ongoing student and teacher workshops during seminar time on how to use Google docs: for working from school/home, for collaboration. Both the teacher and the seminar class learn together. Ongoing teacher training on the use of technology to assist students with special needs.
2015 Spring	Ongoing student and teacher workshops during "seminar" time on how to use Google sites: to create a web page or site for an assignment, class or club. Both the teacher and the seminar class learn together. In addition departments will share ideas concerning teacher made websites that support the curriculum. Some teachers attend the Macul Conference; share so aspects with teams and departments. Departments conduct mini workshops on the use of technology in the curriculum.
August 2015	Introductory training on new features and enhancements of our internal network hardware and/or software as well as enhancements of Infinite Campus for all staff and a full Infinite Campus training for new staff.
School Year 2015	Ongoing workshops on the use of laptops (on carts) for classroom activities. Ongoing training on the use of assistive technology for students with special needs. Individual teachers and department attend or conduct workshops on the use of technology in instruction. An example would be: One science teachers went to a workshop on using Vernier sensors; he then did a departmental workshop to share what he learned.
August 2016	Introductory training on new features and enhancements of our internal network hardware and/or software as well as enhancements of Infinite Campus for all staff and a full Infinite Campus training for new staff.
School year 2016	Ongoing training on the use of assistive technology for students with special needs. Individual teachers and department attend or conduct workshops on the use of technology in instruction. An example would be: One science teachers went to a workshop on using Vernier sensors; he then did a departmental

	workshop to share what he learned.

Teachers attend workshops at OAISD that include technology as well as other curricular components. Teachers are trained and mentored in the use of our SIS for recording and reporting. Departments conduct mini workshops on the use of technology in the curriculum as the technology changes. Fliers, email, posters make staff aware of offerings.

Technology director attends monthly meetings that cover a variety of technology related topics. Examples include, MSDS, Legal Issues, District Policies, and Filtering. The OAISD staff and regional experts provide ongoing support for technology to all schools in our area.

Supporting Resources – SECTION 10

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

We maintain an online activity calendar for all school activities. Some coaches have separate shared calendars for teams. Parents are able to subscribe to emails or text messages indicating when school is closed for “snow days”.

We have a number of student teacher and Interns from local colleges who acquaint staff with new learning technologies at these schools.

Google Accounts for all grade 4-12 students will allow students and teachers to collaborate on documents; to view and edit documents from any Internet connected device and to increase use of electronic media as opposed to printed documents. While we implement this, a series of training sessions for students and staff will be schedules.

TI calculators and supporting software are used and will be used extensively in math and science courses. Each math classroom has a set of calculators.

Science Probes/ Interfaces and supporting software are being integrated into the 6-12 science curriculum.

Mathematical modeling software is used in upper level math and science courses.Vernier’s Logger Pro and Fathom are examples.

REMC materials are available via online order forms.

We would like to subscribe to online video learning but greater bandwidth and increase LAN capacity will be required.

Infrastructure Needs/Technical Specification, and Design – SECTION 11

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 the technologies to be acquired

Currently we have a single LAN with approximately 200 computers, 60 terminals and three servers About 60 computers are used by the teachers and students in the classroom; 65 are in three computer labs (including 12 in the Digital Art lab) and 10 are used primarily by administration. The others are laptops or net books. Access is via a 3 megabit fiber line from our site to OAISD. All computers share this line. Of the 200 computer stations most are less than three years old. All teachers have access to networked printers and/or a desktop printer. About 85% of the classrooms have a projector; we hope to expand this to all classrooms soon. Our LAN is accessible only from within the school.

We have five older computers dedicated to the music department. They are used for music composition and editing and each is equipped with a midi keyboard.

Uniformity in hardware and software configurations across staff computers and student labs is essential to keep support costs reasonable. With only a few images to maintain, computers can be repaired and re-imaged often in 30 minutes or less as opposed to several hours to set up a single machine or crashed drive. Nearly all desktop computers are running Windows 7, Office 2010 and the latest version of Open Office.

Teachers/departments are polled to determine what is needed to support the curriculum. The Technology director and Task Force reviews and edits recommendations. Sources for funding are actively sought. Consultants and OAISD experts may be used to determine the hardware and software required to support the needs and to be sure all aspects of the network, hardware and software work together. Since OAISD provides Internet via the Merit Network, routers and switches are chosen to meet common specifications. These specifications are applied to most of the schools in our area to maximize collaboration in the use of in house technical support.

We constantly struggle to provide the technology needed. We are unable to use “bond money”, we never qualify for more than erate telecommunications at 40%. Since our free and reduced lunch is about 16%, we rarely qualify technology grants. Our computer labs are overused; we have no space to expand and lack the funds for a 1:1 program. We encourage students to BYOT (Bring Your Own Technology) but this is overloading our technology infrastructure.

Currently we have a part time Technology Director and a full time technician who installs and supports all LAN connected computer hardware and standard software as well as specialized software and hardware for students with disabilities. The director provides training in using our Student Information System, technology integration and required State reporting. We also use OAISD personnel for support of Applications hosted at their site (filtering, antivirus, spam)

Goal Item	Rationale	Timetable	Estimated Costs
Local and long distance phone service (expand as needed if enrollment and/or staff increases	Basic communication	continues	$500-$700 per month for the present 14 lines

Internet Access and Filtering to meet CIPA guidelines (at increased bandwidth)	Basic communication	continues	$3000 per year
Continue to Use Infinite Campus as our SIS	We updated our SIS in 2006 to meet the increased reporting requirements of the MSDS and NCLB. We continue to expand its use.	continues	approx. $10 per student per year
Wireless (Cell) Phones	Classes that meet off campus, field trips, persons who do not have a permanent office or desk require communication. These and administrative smartphones are also used for emergency communication.	continues	$650/mo.
Large Flat 42 inch or larger screens with computer inputs or mounted projectors with computer and video inputs to all class rooms (with cables and mounting). We still have about 10 classrooms without a large screen.	Students and teachers can make computer/presentation that the whole class can see.	2014 for K-3 Classrooms	Approximately $1000 per room x 10 classrooms
Provide increased bandwidth so teachers can access online videos Increased bandwidth to the Internet.	Downloaded/streamed video clips can be shown to the class.	2014	$500/mo.
Continue to expand wireless access in our academic classrooms and study areas	Because funding a 1:1 program is beyond our current budget, we will encourage students to “bring your own technology”. Wireless access lets the students search and access Internet resources and allow staff who roam to carry a net book, laptop or PDA type device to also access resources such as Google docs and Infinite Campus.	2014 or 15 for music area	$6,000 or significantly more for high density one to one computing
Network modifications to meet the State 2010 technology goals.	Modify the present network infrastructure to Gigabit local capacity and 40 Megabit Internet. A new router for security is also needed. Implement a method of bandwidth allocation. Keep the student/public network separate from the internal private network to maintain security.	2014 (possibly even more Internet bandwidth in 2015)	$10,000 (est.)

Wireless computers on Carts	A mobile computer lab provides increased access	2014 or as funding allows	$12,000 for each classroom set of 20-24 laptops/netbooks.
Ongoing technical support and training. The Michigan Technology Staffing Guidelines justify this level of staffing.	1. Part Time Technology Director Position Full Time Technologist to maintain hardware and software	All years	.5 FTE 1.0 FTE
Hardware and software maintenance and security.	2. Outside Consultants	All years	$3000 per year
Ongoing supplies such as disks, printer cartridges, toner, CD's, DVD's, software updates and anti-virus subscriptions.	Essential to keep things working	All years	$7000 per year
Professional Development	Not less than six hours per year available (and expected of all teachers) at BRPS.	All years	$4000
Assistive Technology	Appropriate cost effective assistive technology available to students with special needs.	All years, as specified in the student's IEP	Unknown
Color Printing/Copying	In some areas, particularly for young students the use of color enhances their education sufficiently to justify the added cost. We will investigate and implement color printing/copying as benefits justify costs.	2015	$500 per month for a lease/purchase copier/printer plus about $.10 per page.

Increase Access – SECTION 12

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

Wireless network expansion is planned as funding permits.

We plan to implement Google (or similar) accounts that are available from outside and inside school for students and staff. The accounts should include email, storage, calendar and collaboration capabilities.

We will continue to encourage students to “bring their own technology” for those who own or plan to purchase devices that can access online educational resources. We will Increase the number of computers that are available for students use and/or the hours that the computer labs are open. Our main computer lab is open after school for student use for a time period of 1.5 hours each school day. Families without home computers or access will be made aware of Macnet which seeks to recycle donated computers to needy families in the community.

Budget and Timetable – SECTION 13

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

We are applying for grants and additional funding. The budget is revised when we receive the grants.

Yearly Budgets are no longer required.

Presently E-rate supplies 40% of our funding for telecommunications services (local, long distance and cell phone services. We anticipate E-rate will also supply 40% of the funding for our Internet connection using leased data lines. We are unable to use bond money for technology; charter schools cannot issue bonds the way traditional public districts do.

Telecommunications			
Qty (months)	Product or Service Description	Monthly (Recurring)	Total for Year
12	Cellular Service - 9 phones used for field trip and off campus communication among staff.	$ 500.00	$ 6,000.00
12	Monthly Phone - local Service & Long Distance Service 16 lines including required alarm systems	$ 600.00	$ 7,200.00
Internet Access			
12	Monthly Fee for High Speed Fiber Data (also used for video) Connection between Intermediate School District (County) and Black River at least 40 MBS so we can get Internet for 200 school owned computers, plus access for up to 850 students, 65+ staff members.	$ 550.00 (est.)	$ 6,600.00

We have never received E-rate funding for internal connections because our free and reduced population is too low.

Major capital purchases are not included in this yearly budget since they often depend on grants and other uncertain funding.

Coordination of Resources – SECTION 14

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

Funding technology remains a challenge for us. We cannot use bond issues for technology assets like the large public districts; nor do we have the funding sources that some local (religious) private schools have. We have to finance nearly all of our building and technology acquisitions through loans, donations or the per pupil funding provided by the state. We apply for e-rate funds yearly but we have never been eligible for more than the 40% level and only telecommunications and Internet access funding.

Funding from the state "foundation grant" has sometimes been inconsistent. As a result technology purchases may be delayed or not funded.

We also apply for other grants. We are frequently unsuccessful in grant applications only because our county is low poverty (about 7%) and free/reduced lunch status (about 20% for us) is frequently one of the major criteria for Federal, State and private grants. We also do not qualify for some of the very large grants because of our small size and limited resources.

Strategies to try to insure long-term investment and sustainability of technology:

1. We apply annually for e-rate funding and search and apply for other grants for which we are eligible.
2. We have worked and continue to work with several local companies to receive donated computers and other hardware. The companies frequently update their hardware every three years. In the past, a three year old computer has been adequate for pursuing our educational goals.
3. The school is committed to an annual budget for technology. The budget increases with enrollment and as our foundation grant increases.
4. The school is committed to finding technology required to support the curriculum. The teachers, the technology and the curriculum committees determine the needs. The board attempts to fund those needs. For example, we acquired a digital art laboratory; this involved both technology budget and art supplies budget.
5. We take advantage of resources provided by our ISD (OAISD);they provide technical advice, curricular advice, workshops, some system support and help with Internet access for us. Since they have far more resources in staff, hardware and software, as their technology systems are upgraded we try to follow. For example, OAISD coordinates the WAN project as well as monthly meetings of Technology Directors to develop a vision and strategy for technology use.
6. We are considering implementing more "open standard" software such as "Open Office" to decrease our licensing costs and to familiarize students with the use of "Open" products in the business market. This software promotes equity. Since there are no fees for the software; students with fewer financial resources can use it on hardware available for little or no cost from Macnet which is a local computer recycling service located one block from our campus.

Evaluation – SECTION 15

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 and national academic standards

8th grade students are tested annually on the NETS standards. We hope to see improvement in the scores.

NWEA testing (twice a year) gives us feedback on students' performance on Michigan standards in Math and Language Arts.

College admission is a requirement for graduation beginning with the class of 2011. We are attempting to prepare 100% of our students for college. Part of the evaluation will be that we succeed in getting all students admitted to college at the end of the third year of this plan.

The Technology Plan Committee will meet annually to evaluate progress and make revisions as necessary. Evaluation will include progress in implementing hardware and software as well as student performance as indicated by tests and teacher observations.

Unmet goals will be reevaluated taking into account the identified deviancies as well as available resources. The committees will attempt to address deficiencies or revise goals.

Acceptable Use Policy – SECTION 16

Strategies are in place to monitor the district's Acceptable Use Plan for staff and student use of the technologies

Both faculty handbook and student handbook contain an Acceptable Use Policy.

School Technology should be used primarily for educational purposes related to the attainment of the schools mission. Other uses such as commercial or political use are unacceptable.

Black River Public School has developed a comprehensive policy to establish acceptable use of the School's computers in regards to the School's networks and the larger Internet. To assure compliance, students are always supervised when using computers at school. Administrators communicate the AUP to staff and monitor their compliance.

RULES ON ACCEPTABLE USE OF COMPUTER NETWORK RESOURCES

Use of the computer network is a privilege, not a right. The fundamental rule for use of District computer network resources is that all use must be consistent with Black River Public School's educational goals and behavior expectations. Because electronic communications are so varied and diverse, these rules do not attempt to enumerate all required or proscribed behavior by system users. Users are expected to use common sense and adhere to the norms of behavior in the school community. In particular, users should:

- Be polite and courteous in all communications and language.
- Assist others in the use of the system, and help others who are looking for ideas or information.
- Always use the network as a resource to further their own education and that of others.
- Be mindful of network security, and immediately report any bugs, errors, or security problems to the system administrator.

Users may not:

- Use Black River Public School equipment for anything contrary to law, or to solicit others to break any law.
- Illegally copy, send, or distribute any copyrighted software, work, or other material.
- Send, publish, download, access, or retrieve any communication or material which may be defamatory, abusive, obscene, profane, sexually explicit, threatening, racially or ethnically offensive, harassing, or illegal, or anything which violates or infringes on the rights of any person.
- Use the network for any commercial purpose or financial gain.
- Use the network for any advertisement or solicitation without approval from the Head of School.
- Access, attempt to access, modify, or delete any record or file not owned by the user without permission or authorization.

- Make any attempt to harm or destroy the data of any other user or any system on the network, including creating or sending computer viruses, Trojan horses, or similar computer code.
- Use electronic mail to send unsolicited, bulk, chain, harassing, anonymous, or other messages which are commonly considered an annoyance to recipients or degrade system performance.
- Use vulgarity, obscenity, or swearing in messages or electronic postings, or send e-mail/message “flames” or other attacks.
- Attempt to access material or sites which are blocked by Black River Public School, or attempt to use the network while access privileges are suspended.

Black River Public School provides access to our computer network to students and staff so as to promote and enhance the learning of our students through communication, innovation, and sharing of resources. Access to the network is a privilege, not a right, and Black River Public School may restrict, suspend, or terminate any staff or student user’s access/account with or without cause at any time. In requesting or using an account for access to the network, the user agrees to the following terms and conditions. Failure to abide by these terms and conditions, or any of Black River Public School's rules and regulations for computer network use, may result in the loss of privileges, disciplinary action, and/or legal action.

Use of the network must be for the purpose of education and research consistent with the goals of Black River Public School.

All use of the network must be in accord with Black River Public School's rules on acceptable use of network resources, as updated from time to time by Black River Public School.

Black River Public School makes no warranties of any kind, whether expressed or implied, for the service it is providing. Black River Public School will not be responsible for any damages the user suffers, including but not limited to the loss of data, delays, non-deliveries, or service interruptions caused by its negligence or the user’s errors or omissions.

The network provides access to third-party data and information over which Black River Public School has no control. Though Black River Public School may make efforts to block inappropriate material, users may be exposed to defamatory, inaccurate, or otherwise offensive material. Use of the network or any information obtained via the network is at the user’s own risk. Black River Public School specifically denies any responsibility for the accuracy or content of information obtained through its services.

The user is solely responsible for all charges and fees, including outside telephone, printing, and merchandise purchases made through the network. Black River Public School 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. Black River does not guarantee the security or privacy of any personal or financial data transmitted using its network.

The user agrees to indemnify Black River Public School for any losses, costs, or damages, including reasonable attorney’s fees, incurred by Black River Public School relating to or arising out of any breach of the terms of network access.

The user acknowledges that Black River Public School's computer network belongs solely to Black River Public School and that any files, records, electronic mail or other communication may be examined, edited, or deleted by Black River Public School at any time, in accord with District policy

or regulations.

I understand and agree to abide by the terms of this request for network access, and Black River Public School rules for acceptable use of network resources. I further understand that should I commit any violation, my access privileges may be revoked, and school disciplinary and/or appropriate legal action may be taken. In consideration for using Black River Public School's network connection and having access to public networks, I hereby release the school District and its Board members, employees, and agents from any claims and damages arising from my use, or inability to use, the network.

_____ _____

Signature (use) Date

_____ _____

Signature (guardian for those under 18) Date