Technology Plan 2011-2014
Dollar Bay Tamarack City Area Schools

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Intermediate School District

Copper Country Intermediate School District

Technology Plan Web Address

http://www.dollarbay.k12.mi.us/Default.aspx?tabid=124

Table of Contents

Introduction

District School Improvement Vision/Mission Statement

Utilizing our uniquely small size, our mission is to:

* educate students to compete successfully in our changing world
* prepare students for life-long learning, and responsible citizenship
* encourage social, emotional and physical well-being

by working cooperatively with organizations, our community and its families.

Description of School District

Dollar Bay Tamarack City Area Schools is a small K-12 school in a small community. Our student count from kindergarten through 12th grade is approximately 300. We average 23 students per grade level. The small number of students compared to other schools allows for a more personable and familial atmosphere between staff, students and community members.

All classes are within one building which contains a wing for grades K-6, a 3 story building with basement for the Middle School and High School, and a Gymnasium. The High School/Middle School was built in 1914. Major renovations were made in the mid 1990's to upgrade facilities, build a new gymnasium, add classroom space, and attach the lower elementary building, which was previously a separate building.

There is one teacher for each grade level from kindergarten through 6th grade. There are 12 teachers that teach at the middle school and high school level. Some of these teachers also help out with special classes for the elementary. Administration includes a superintendent and a principal. There are 11 support staff. The Board of Education contains 7 community members who all have or have had children in the Dollar Bay Tamarack City Area School District.

Despite being a small school district Dollar Bay offers a rich and varied curriculum. We meet all state and federal requirements for our curriculum. We also make use of distance learning classes and career & technical education classes through our local Copper Country Intermediate School District. Two universities, Michigan Technological University and Finlandia University, are within 5 miles. Students are given the opportunity for dual enrollment at these institutions while still in high school. Our school maintains a library, which is both the school library and a public library.

The Dollar Bay community contains a mixture of predominantly blue collar working families and some white collar working families. There are numerous small businesses in the community but no dominating industry. Many community members also work in neighboring districts, which are larger than ours. The number of students receiving free or reduced lunch is approximately 60% making us an at risk school district. Despite being an at risk school district students have good achievement scores. In the school years ending in 2008 through 2011, Dollar Bay High School was a bronze medalist in a national comparison done by U.S. News & World Report. A majority of our students go on to college. Students who don't go to college typically get jobs in or out of the area or join the military. We do not have a great deal of cultural diversity. We are about 98% European descent and 2% African American descent.

Vision and Goals

Three words come to mind when addressing school technology: Tutee, Tool, and Tutor. Tutee implies teaching. Students and staff must be taught to understand and use technology, both hardware and software. Technology itself is part of the curriculum, an object of learning as is any school discipline like math or history. Tool implies that we use technology as a resource. Once staff and students have learned to use a component of hardware or software they can then uutilize them as a tool in their present academic endeavors. Tutor implies that technology can help us learn. We not only learn technology but technology can help us learn. We can use technology to help us learn in other academic disciplines within our curriculum. Thus we teach technology (i.e. tutee) so that we can use technology as a tool or a tutor

Technological systems involve 5 elements: hardware, software, people, procedures, and data. Hardware is the equipment. Software is the instructions for the equipment. People are the ones who must use hardware and software to generate useful data. Procedures are the instructions for people on how to use hardware and software to generate and manipulate data. Data is the information the staff and student need to generate and manipulate to accomplish their particular goals. A successful technology system is not just a matter of purchasing some hardware and software and putting it on a desktop. Their must be planning, training, implementing, and evaluation.

Technology is more than just a part of our educational system. It is an integral part of our community, society, and world. Students are part of an ever advancing technological world. Therefore students must be aware of social and ethical issues related to the use of technology. Students must be made aware of how technology can impact us for better or worse based on how it is used and managed. Then they can make better choices as they continue to use technology throughout their life. There are many inappropriate uses of technology in the educational setting, including anti social behavior such as bullying. Staff need to be trained to monitor and discourage any misuse to maintain security, safety and keep students from being exposed to negative and unproductive opportunities that technology may provide.

The school district currently has a viable and effective technology base, which is being used to enhance the educational process. It is the goal of the school district to maintain and develop this technology base as funds allow to ensure future success in the following areas.

Curriculum

- Integrate updated technology standards and benchmarks into existing content standards and applied to established district curricular content so that students will

  A) have basic operational and conceptual skills related to technology
  B) have social and ethical awareness of technology related issues
  C) be able to use effectively various productivity, communications, and research tools
  D) use technology to help enhance decision making and problem solving

- Promote classes which directly teach technology

- Encourage teachers and staff to include technology integration, including assistive technology, to promote learning in each subject area.

- Increase online methods of communication between students, teachers, and parents through email, internet based document sharing, teleconferencing, and remote login capabilities

Professional Development

- Provide ongoing training and support necessary for teachers to use technology effectively in the classroom, and to integrate technology-enhanced methods into their teaching.

- Provide training for teachers to monitor the proper use of technology to insure students aren't exposed to potentially negative aspects of technology including bullying, inappropriate images, predatory relationships in chat rooms and various social networks,and non productive use of time, etc.

Infrastructure

- Maintain an up-to-date system that will be accessible to all teachers, staff, and students in order to provide a technology-rich learning environment.

- Explore and integrate new or untapped technology resources such as electronic books, teleconferencing, and remote access.

Technical Support

- Support and assist teachers and staff to ensure that all hardware, software, and network resources can be utilized in the learning environment.

Monitoring and Evaluation

- Monitor and evaluate continuously to ensure that technology is being utilized in a way that best enhances teaching and learning

Curriculum: Integration

The school district's intent is to have a curriculum aligned with the state and national standards. To that end the following goals and timelines will be promoted in our K-12 curriculum to ensure students have basic operational and conceptual skills, social and ethical awareness of technological issue, skills in the use of productivity tools, communication tools, and research tools, and enhanced decision making and problem solving skills.

Basic Operations and Concepts

By the end of Grade 2 each student will:
1. understand that people use many types of technologies in their daily lives (e.g., computers, cameras, audio/video players, phones, televisions)
2. identify common uses of technology found in daily life
3. recognize, name, and will be able to label the major hardware components in a computer system (e.g., computer, monitor, keyboard, mouse, and printer)
4. identify the functions of the major hardware components in a computer system
5. discuss the basic care of computer hardware and various media types (e.g., diskettes, CDs, DVDs, videotapes)
6. use various age-appropriate technologies for gathering information (e.g., dictionaries, encyclopedias, audio/video players, phones, web resources)
7. use a variety of age-appropriate technologies for sharing information (e.g., drawing a picture, writing a story)
8. recognize the functions of basic file menu commands (e.g., new, open, close, save, print)
9. proofread and edit their writing using appropriate resources including dictionaries and a class developed checklist both individually and as a group

By the end of Grade 5 each student will:
1. discuss ways technology has changed life at school and at home
2. discuss ways technology has changed business and government over the years
3. recognize and discuss the need for security applications (e.g., virus detection, spam defense, popup blockers, firewalls) to help protect information and to keep the system functioning properly
4. know how to use basic input/output devices and other peripherals (e.g., scanners, digital cameras, video projectors)
5. know proper keyboarding positions and touch-typing techniques
6. manage and maintain files on a hard drive or the network
7. demonstrate proper care in the use of hardware, software, peripherals, and storage media
8. know how to exchange files with other students using technology (e.g., e-mail attachments, network file sharing, diskettes, flash drives)
9. identify which types of software can be used most effectively for different types of data, for different information needs, or for conveying results to different audiences
10. identify search strategies for locating needed information on the internet
11. proofread and edit writing using appropriate resources (e.g., dictionary, spell check, grammar check, grammar references, writing references) and grade level appropriate checklists both individually and in groups

By the end of Grade 8 each student will:
1. use proper keyboarding posture, finger positions, and touch-typing techniques to improve accuracy, speed, and general efficiency in operating a computer
2. use appropriate technology terminology
3. use a variety of technology tools (e.g., dictionary, thesaurus, grammar-checker, calculator) to maximize the accuracy of technology-produced products
4. understand that new technology tools can be developed to do what could not be done without the use of technology
5. describe strategies for identifying and preventing routine hardware and software problems that may occur during everyday technology use

6. identify changes in hardware and software systems over time and discuss how these changes affected various groups (e.g., individual users, education, government, and businesses)
7. discuss common hardware and software difficulties and identify strategies for trouble-shooting and problem solving
8. identify characteristics that suggest that the computer system hardware or software might need to be upgraded
9. identify a variety of information storage devices (e.g., floppies, CDs, DVDs, fl ash drives, tapes) and provide a rationale for using a certain device for a specific purpose
10. identify technology resources that assist with various consumer-related activities (e.g., budgets, purchases, banking transactions, product descriptions)
11. identify appropriate fi le formats for a variety of applications
12. use basic utility programs or built-in application functions to convert fi le formats
13. proofread and edit writing using appropriate resources (e.g., dictionary, spell check, grammar check, grammar references, writing references) and grade level appropriate checklists both individually and in groups

By the end of Grade 12 each student will:
1. discuss emerging technology resources (e.g., podcasting, webcasting, compressed video delivery, online file sharing, graphing calculators, global positioning software)
2. identify the capabilities and limitations of emerging communication resources
3. understand the importance of both the predictable and unpredictable impacts of technology
4. identify changes in hardware and software systems over time and discuss how these changes might affect the individual personally in his/her role as a lifelong learner
5. understand the purpose, scope, and use of assistive technology
6. understand that access to online learning increases educational and workplace opportunities
7. be provided with the opportunity to learn in a virtual environment as a strategy to build 21st century learning skills
8. understand the relationship between electronic resources, infrastructure, and connectivity
9. routinely apply touch-typing techniques with advanced accuracy, speed, and effi ciency
10. assess and solve hardware and software problems by using online help or other user documentation and support
11. identify common graphic, audio, and video file formats (jpeg, gif, bmp, mpeg, wav)
12. demonstrate how to import/export text, graphics, or audio files
13. proofread and edit a document using an application's spelling and grammar checking functions

Social, Ethical, and Human Issues

By the end of Grade 2 each student will:
1. identify common uses of information and communication technologies
2. discuss advantages and disadvantages of using technology
3. recognize that using a password helps protect the privacy of information
4. discuss scenarios describing acceptable and unacceptable uses of age-appropriate technology (e.g., computers, phones, 911, internet, email) at home or at school
5. discuss the consequences of irresponsible uses of technology resources at home or at school
6. understand that technology is a tool to help complete a task
7. understand that technology is a source of information, learning, and entertainment
8 . identify places in the community where one can access technology

By the end of Grade 5 each student will:
1. identify cultural and societal issues relating to technology
2. discuss how information and communication technology supports collaboration, productivity, and lifelong learning
3. discuss how various assistive technologies can benefit individuals with disabilities
4. discuss the accuracy, relevance, appropriateness, and bias of electronic information sources

5. discuss scenarios describing acceptable and unacceptable uses of technology (e.g., computers, digital cameras, cell-phones, PDAs, wireless connectivity) and describe consequences of inappropriate use
6. discuss basic issues regarding appropriate and inappropriate uses of technology (e.g., copyright, privacy, file sharing, spam, viruses, plagiarism) and related laws
7. use age-appropriate citing of sources for electronic reports
8. identify appropriate kinds of information that should be shared in public chat rooms
9. identify safety precautions that should be taken while on-line
10. explore various technology resources that could assist in pursuing personal goals
11. identify technology resources and describe how those resources improve the ability to communicate, increase productivity, or help achieve personal goals

By the end of Grade 8 each student will:
1. understand the potential risks and dangers associated with on-line communications
2 . identify security issues related to e-commerce
3. discuss issues related to acceptable and responsible use of technology (e.g., privacy, security, copyright, plagiarism, spam, viruses, file-sharing)
4. describe possible consequences and costs related to unethical use of information and communication technologies
5. discuss the societal impact of technology in the future
6. provide accurate citations when referencing information from outside sources in electronic reports
7. use technology to identify and explore various occupations or careers
8. discuss possible uses of technology (present and future) to support personal pursuits and lifelong learning
9 . identify uses of technology to support communication with peers, family, or school personnel

By the end of Grade 12 each student will:
1. identify legal and ethical issues related to use of information and communication technology
2. analyze current trends in information and communication technology and assess the potential of emerging technologies for ethical and unethical uses
3. discuss possible long-range effects of unethical uses of technology (e.g., virus spreading, fi le pirating, hacking) on cultures and society
4. discuss the possible consequences and costs of unethical uses of information and computer technology
5. identify ways that individuals can protect their technology systems from unethical or unscrupulous users
6. demonstrate the ethical use of technology as a digital citizen and lifelong learner
7. explain the differences between freeware, shareware, and commercial software
8. adhere to fair use and copyright guidelines
9. create appropriate citations for resources when presenting research findings
10. adhere to the district acceptable use policy as well as state and federal laws
11. explore career opportunities and identify their related technology skill requirements
12. design and implement a personal learning plan that includes technology to support his/her lifelong learning goals

Technology Productivity Tools

By the end of Grade 2 each student will:
1. know how to use a variety of productivity software (e.g., word processors, drawing tools, presentation software) to convey ideas and illustrate concepts
2 . be able to recognize the best type of productivity software to use for certain age-appropriate tasks (e.g., word processing, drawing, web browsing)
3. be aware of how to work with others when using technology tools (e.g., word processors, drawing tools, presentation software) to convey ideas or illustrate simple concepts relating to a specified project

By the end of Grade 5 each student will:

1. know how to use menu options in applications to print, format, add multimedia features; open, save, manage files; and use various grammar tools (e.g., dictionary, thesaurus, spell-checker)
2. know how to insert various objects (e.g., photos, graphics, sound, video) into word processing documents, presentations, or web documents
3. use a variety of technology tools and applications to promote creativity
4. understand that existing (and future) technologies are the result of human creativity
5. collaborate with classmates using a variety of technology tools to plan, organize, and create a group project

By the end of Grade 8 each student will:
1. apply common software features (e.g., thesaurus, formulas, charts, graphics, sounds) to enhance communication and to support creativity
2. use a variety of technology resources, including the internet, to increase learning and productivity
3. explore basic applications that promote creativity (e.g., graphics, presentation, photo-editing, programming, video-editing)
4. use available utilities for editing pictures, images, or charts
5. use collaborative tools to design, develop, and enhance materials, publications, or presentations

By the end of Grade 12 each student will:
1. complete at least one online credit, or non-credit, course or online learning experience
2. use technology tools for managing and communicating personal information (e.g., fi nances, contact information, schedules, purchases, correspondence)
3. have access to and utilize assistive technology tools
4. apply advanced software features such as an application's built-in thesaurus, templates, and styles to improve the appearance of word processing documents, spreadsheets, and presentations
5. identify technology tools (e.g., authoring tools or other hardware and software resources) that could be used to create a group project
6. use an online tutorial and discuss the benefi ts and disadvantages of this method of learning
7. develop a document or fi le for inclusion into a web site or web page
8. use a variety of applications to plan, create, and edit a multimedia product (e.g., model, webcast, presentation, publication, or other creative work)
9. have the opportunity to participate in real-life experiences associated with technology-related careers

Technology Communications Tools

By the end of Grade 2 each student will:
1. identify procedures for safely using basic telecommunication tools (e.g., e-mail, phones) with assistance from teachers, parents, or student partners
2. know how to use age-appropriate media (e.g., presentation software, newsletters, word processors) to communicate ideas to classmates, families, and others
3. know how to select media formats (e.g., text, graphics, photos, video), with assistance from teachers, parents, or student partners, to communicate and share ideas with classmates, families, and others

By the end of Grade 5 each student will:
1. use basic telecommunication tools (e.g., e-mail, WebQuests, IM, blogs, chat rooms, web conferencing) for collaborative projects with other students
2. 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
3. identify how different forms of media and formats may be used to share similar information, depending on the intended audience (e.g., presentations for classmates, newsletters for parents)

By the end of Grade 8 each student will:
1. use a variety of telecommunication tools (e.g., e-mail, discussion groups, IM, chat rooms, blogs, video-conferences, web conferences) or other online resources to collaborate interactively with peers, experts, and other audiences

2. create a project (e.g., presentation, web page, newsletter, information brochure) using a variety of media and formats (e.g., graphs, charts, audio, graphics, video) to present content information to an audience

By the end of Grade 12 each student will:
1. identify and describe various telecommunications or online technologies (e.g., desktop conferencing, listservs, blogs, virtual reality)
2. use available technologies (e.g., desktop conferencing, e-mail, groupware, instantmessaging) to communicate with others on a class assignment or project
3. use a variety of media and formats to design, develop, publish, and present products (e.g., presentations, newsletters, web sites) to communicate original ideas to multiple audiences
4. collaborate in content-related projects that integrate a variety of media (e.g., print, audio, video, graphic, simulations, and models) with presentation, word processing, publishing, database, graphics design, or spreadsheet applications
5. plan and implement a collaborative project using telecommunications tools (e.g., groupware, interactive web sites, videoconferencing)

Technology Research Tools

By the end of Grade 2 each student will:
1. know how to recognize the Web browser and associate it with accessing resources on the internet
2. use a variety of technology resources (e.g., CD-ROMs, DVDs, search engines, websites) to locate or collect information relating to a specific curricular topic with assistance from teachers, parents, or student partners
3. interpret simple information from existing age-appropriate electronic databases (e.g., dictionaries, encyclopedias, spreadsheets) with assistance from teachers, parents, or student partners
4. provide a rationale for choosing one type of technology over another for completing a specific task

By the end of Grade 5 each student will:
1. use Web search engines and built-in search functions of other various resources to locate information
2. describe basic guidelines for determining the validity of information accessed from various sources (e.g., web site, dictionary, on-line newspaper, CD-ROM)
3. know how to independently use existing databases (e.g., library catalogs, electronic dictionaries, encyclopedias) to locate, sort, and interpret information on an assigned topic
4. perform simple queries on existing databases and report results on an assigned topic
5. identify appropriate technology tools and resources by evaluating the accuracy, appropriateness, and bias of the resource
6. compare and contrast the functions and capabilities of the word processor, database, and spreadsheet for gathering data, processing data, performing calculations, and reporting results

By the end of Grade 8 each student will:
1. use a variety of Web search engines to locate information
2. evaluate information from various online resources for accuracy, bias, appropriateness, and comprehensiveness
3. identify types of internet sites based on their domain names (e.g., edu, com, org, gov, au)
4. know how to create and populate a database
5. perform queries on existing databases
6. know how to create and modify a simple database report
7. evaluate new technology tools and resources and determine the most appropriate tool to use for accomplishing a specific task

By the end of Grade 12 each student will:
1. compare, evaluate, and select appropriate internet search engines to locate information
2. formulate and use evaluation criteria (authority, accuracy, relevancy, timeliness) for information located on the internet to present research findings
3. determine if online sources are authoritative, valid, reliable, relevant, and comprehensive
4. distinguish between fact, opinion, point of view, and inference

5. evaluate resources for stereotyping, prejudice, and misrepresentation
6. develop a plan to gather information using various research strategies (e.g., interviews, questionnaires, experiments, online surveys)

Technology Problem-Solving and Decision-Making Tools

By the end of Grade 2 each student will:
1. discuss how to use technology resources (e.g., dictionaries, encyclopedias, search engines, websites) to solve age-appropriate problems
2 . identify ways that technology has been used to address real-world problems (personal or community)

By the end of Grade 5 each student will:
1. use technology resources to access information that can assist in making informed decisions about everyday matters (e.g., which movie to see, which product to purchase)
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 real-life problems (personal or community)

By the end of Grade 8 each student will:
1. use database or spreadsheet information to make predictions, develop strategies, and evaluate decisions to assist with solving a basic problem
2. describe the information and communication technology tools to use for collecting information from different sources, analyze findings, and draw conclusions for addressing real-world problems

By the end of Grade 12 each student will:
1. use a variety of technology resources (e.g., educational software, simulations, models) for problem solving and independent learning
2. describe the possible integration of two or more information and communication technology tools or resources to collaborate with peers, community members, and fi eld experts
3. formulate a research question or hypothesis, then use appropriate information and communication technology resources to collect relevant information, analyze the findings, and report the results to multiple audiences

Curriculum: Student Achievement

The strategy for delivery of the curriculum goals listed above are three fold; formal classes in technology, integrating technology into all classes, and student exploration. Students will have class time devoted specifically to the topic of technology. Technology will also be integrated into the classroom. Teachers will use technology to teach their particular curriculum. Teachers will have students use technology to demonstrate learning and technology skills. Students will be encouraged to explore technology beyond curriculum requirements to further deepen their own understanding and skills.

Formal Technology Classes

Elementary		
Grade K	38 minute class per week	Required
Grade 1	38 minute class per week	Required
Grade 2	38 minute class per week	Required
Grade 3	38 minute class per week	Required
Grade 4	77 minute class per week	Required
Grade 5	77 minute class per week	Required
Grade 6	77 minute class per week	Required
Middle School		
Grade 7	Computer Block (1 trimester)	Required
Grade 8	Computer Block (1 trimester)	Required
High School		
Grade 9	Computer Applications (2 trimesters)	Required
Grade 9-12	Computer Programming I (2 trimesters)	Elective
Grade 9-12	Computer Programming II (2 trimesters)	Elective
Grade 9-12	Publications (2 trimesters)	Elective
Grade 10-12	Computer Aided Drafting & Design (3 trimesters)	Elective
Grade 9-12	Graphic Design & Illustration (1 trimester)	Elective
Grade 9-12	First Year Robotics (1 trimesters)	Elective
Grade 9-12	Marine Robotics (2 trimesters)	Elective l

Lower elementary grade levels will have one 38 minute class every week devoted to learning and using technology. The upper elementary grade levels will have one 77 minute classes every week devoted to learning and using technology. By the end of elementary students will have had the equivalent of 1.25 years of a one hour class. By the end of middle school students will have had an additional year of a one hour class. By the end of 9th grade students will have had an additional full year a one hour class. The overall total of required classroom instruction by ninth grade will be 3.25 years. Following 9th grade there are numerous electives that students can take to further enhance their technology skills. Again these are hours devoted directly to learning about technology. These classes will address both usage and understanding of technology in the 6 context areas: basic operational and conceptual skills, social and ethical awareness of technology issues, skills in the use of productivity tools, communication tools, and research tools, and enhanced decision making and problem solving skills.

Grade K-2 will learn basic operational skills and concepts by focusing on thoroughly learning one application each year such as the paint program. These operational skills will be directly transferable to other applications. Grades K-2 will also broadly touch on productivity software, communications software, and research software as described in the Michigan Technology Standards listed above. Students will use the computer to develop problem solving skills and decision making through educational games. Time will be spent discussing age appropriate impact of technology on society.

Grades 3-6 will complete at least one project in each of the following categories each year: word processing, desktop publishing, spreadsheets, graphs, database, web page design, slide shows, movie making, computer programming, Internet research, and email. Some of these projects will be a progressive integration. For example students create a spreadsheet and then graphs, which are included in a word processing document. Some of the projects will be the same task accomplished in different applications. For example students create a calendar in a desktop publishing program, in a word processing program, in a spreadsheet, and in a web page. This allows students to see that the same task can be accomplished in different ways, some perhaps easier or more effective than others. It gives students a chance to begin making decisions as to the best way to accomplish a task. It gives students experience at numerous ways to solve a problem. Age appropriate discussion on how technology affects society will continue to be discussed with this age group. Students will also spend significant time learning and practicing proper keyboarding methods. Students should be able to type each letter of the alphabet with the appropriate finger without looking. Typing correctly will be stressed at this age level over speed.

Grades 7-8 will continue to progress in their understanding and skills in technology. In grade 7 they will use a different productivity suite then they used in elementary. This will help them cope in their future with different software platforms. They will see that different software platforms accomplish the same task in slightly different ways. Both grades will again have projects in each of the following categories: word processing, desktop publishing, spreadsheets, graphs, database, web page design, slide shows, movie making, computer programming, Internet research, and email. The scope and level of difficulty will be increased. For example Grade 7 and 8 reports will include headers, footers, and page breaks in their word processing reports. Some of these projects will be a progressive integration. For example students create a database of answers to a survey, create a spreadsheet and graph of the survey results, paste the graphs and spreadsheets in a word processing document adding their own analysis of the results. Some of the projects will be the same task accomplished in different applications. For example students create a word processing report with a paragraph and pictures about each class they have in school. Students also create a slide show with animation about each class they have. Finally students create a web site with a main page containing links to a page about each class they have. This allows students to see that the same task can be accomplished in different ways, some perhaps easier or more effective than others. It gives students a chance to begin making decisions as to the best way to accomplish a task. It gives students experience at numerous ways to solve a problem. Age appropriate discussion on how technology affects society will continue to be discussed with this age group. Students will continue working on their formal typing skills. Typing fast will be stressed as well as typing correctly. 7th graders will be encouraged to type

between 12 and 24 words per minute at 80% accuracy. 8th graders will be encouraged to type between 21 to 45 words per minute at 80% accuracy.

Computer Application (9th Grade) students will have a formal text book covering all aspects of computer technology including hardware, software, data, networking, telecommunications, security, social impact. Students will first read to enhance self teaching. Thorough discussion will ensue on each topic. Students will be tested using objective written tests to verify their understanding of given topics on technology at the end of each unit and in a comprehensive exam. Students will continue to be given projects that enhance their understanding and skills in using productivity tools, communication tools, and research tools. The scope and level of difficulty will be increased. For example students will have a research paper with footnotes on a controversy of their choice. Students will be tested with project exams at the end of each semester on their abilities to use productivity, communication, and research tools. Students will be given several end of the year projects where they choose a project of related to a personal interest or need. They will have to define and design the project specifications and then complete the project using the application of their choice. This will enhance their decision making and problem solving skills.

Computer Programming I: Students in this class will spend the first half of the year learning the fundamentals of programming using Quick BASIC: inputting, processing, outputting, storing, sequencing, looping, branching, modularization using procedures and functions, graphics, sound, and data structures. The second half of the year students will spend creating programs: data bases, CAD program, chess program as a team, and various game programs. Students will be able to flow chart, write, type, correct, and mentally execute programming code to solve problems.

Computer Programming II: Students in this class will spend the first half of the year learning the fundamentals of programming using C++. This second language will help them review and build on their programming skills in inputting, processing, outputting, storing, sequencing, looping, branching, modularization using procedures and functions, graphics, sound, and data structures, but using a second language. The second half of the year students will spend learning how to program in Visual Basic. Visual Basic uses the same commands as QBASIC but the commands are embedded in a graphical user interface environment. This half of the year will be project oriented as students use Visual Basic to create graphical user interfaced applications. During the year students will use both languages to flow chart, write, type, correct, and mentally execute programming code to solve problems.

Publications: Publications is a class devoted to creating and updating the schools website, creating the school yearbook, and creating other school based projects as the need arises such as newsletters, annual reports, and video projects. Students will learn basic web page design skills and apply them to create pages for the school website. Students will also learn to create yearbook layouts and upload pictures and text in to those layouts. Students will earn basic photography skills to take digital pictures and modify them for use in the school website, yearbook pages and other assorted projects. Students will also learn public relations skills as they seek to find advertising sponsors to help pay for the cost of the yearbook and other expenses.

Automotive Technology: Automotive Technology introduces and prepares students to explore or enter the automotive field. It provides a "head to hands-on" approach that will lead to success in post-secondary training or an expanding automotive-related field. Students involved in this program may range from technician trainees to pre-engineering students. Some of the instructional areas are braking systems, front end alignment, suspension, on-board computers, sensors, fuel injection, oscilloscope, engine analysis and related support systems. The Automotive Technology program is nationally certified by NATEF (National Automotive Technicians Education Foundation) and is taught by an ASE (Automotive Service Excellence) certified instructor. Students will be given the opportunity to take state and national (ASE) certification tests.

Computer Aided Drafting & Design (CADD): This program teaches students the basic fundamentals of drafting standards. Students can study Mechanical Drafting/Manufacturing or Architectural Drafting and Design and will learn basic entry level drafting standards and skills required for that field. Students will gain experience using the software Solid Works while constructing real world working models. Sketching, geometric construction methods, dimensioning, multi-view drawing layout and much more is taught on the computer.

Graphic Design: In Graphic Design, students will gain experience in the layout and design of a variety of products using graphics software such as Adobe Photoshop, Adobe Illustrator, and other related publishing programs. Students will learn the criteria for good layout, including how to use the elements and principles of design when creating one. This course provides students with a foundation in graphic design, advertising design, typography, communication design basics, two dimensional design, color, and learning to think visually.

First Year Robotics: Robotics Systems links high school, college, and professional organizations through the development of robotic technology. Students work in the fields of science and technology by developing robotic solutions to challenges and competions against other schools. Students work toward improving robotic systems through cooperation with industrial research and development. Students work on land, snow, or aerial robotic systems to achieve a student set goal. Students also have an opportunity in the course to participate in the international FIRST program.

Marine Robotics: Marine Robotics provides students with an opportunity to apply science content knowledge and expand their understanding of scientific knowledge my building underwater Remote Operated Vehicles (ROV). The course serves as a STEM related service learning course where students build a project specific ROVs to fulfill a need in the community. Students oversee the project selection, determine the solution, build the ROV, and work with the community to implement the ROV into service.

Classroom Integration of Technology

Besides the classes above which are specifically devoted to teaching technology, each grade level and each instructor of a subject will be encouraged to reinforce learning and usage of technology in the educational process. Teachers can help deliver the state guided curriculum concerning technology: basic concepts and skills, productivity, communication and research

tools, social impact and ethics, problem solving skills and decision making. They can also use technology to help teach their own individual curriculum i.e. math, science, language arts, social studies, etc. Teachers will be encouraged to plan one technology integrated project per class per quarter. Teachers will also be challenged to include each of the following applications in a class project at lest once during the course of the year: word processing, spreadsheets, graphs, database, desktop publishing, slide show, web pages, movie, internet research, telecommunications. Most teachers do already include technology based projects as part of their curriculum but we want to expand its usage in depth and scope.

Some classes use technology more extensively than others. The two courses in robotics makes use of extensive research and application in the area of technology as they design underwater robots with cameras and mobile land robots capable of picking up and moving objects. The drafting and shop classes make use of software to design products before they actually make them. The band teacher is starting a new class, which will use notation software on the computer connected to keyboard through a MIDI interface. This will be a central tool for her new class on music theory. Many teachers make regular use of word processing, desktop publishing, and slide shows. Many teachers use the Internet as a research tool. To help encourage teachers to further teach and use technology in teaching they will be given a portfolio of students work from the technology classes that are taught. This will help make teachers aware of the student's capabilities and give them ideas that they can include in their own classroom projects. Teachers will also be visited regularly by technology support staff to see if they are integrating technology into their lesson plans and if they need any help.

Teachers have a number of tools at their disposal to enhance delivery of their curriculum. Two of the labs have electronic Smart Board technology allowing staff and students a greater level of interaction with technology as they teach. All teachers have computer projectors, Smart Slates, and document cameras, except the band room and shop. This allows an even more mobile version of the Smart Board since the teacher can walk around with the Smart Slate or place it in front of students to use. Along with the Smart Board/Slate technology comes the software package Smart Notebook. This program allows the teacher to create interactive slide shows or imitate an electronic chalkboard whereby they can save their notes for redisplay or review. Students also have access to this software to create dynamic interactive slide shows.

Student Exploration

Students may wish to go deeper into learning and using technology. They will be encouraged in doing class related self teaching in spare time they may have of time devoted to completing given projects. Teachers will be encouraged to let students brainstorm their own way of demonstrating their knowledge and abilities using technology. For example a student may want to learn more about movie making and then use that as a means of showing his knowledge instead of doing a word processing report. This may require the student do some self teaching if the teacher doesn't have time to teach movie making at that point in time. Such exploration will be encouraged as time and scope permit.

Curriculum: Technology Delivery

There are several sources of technology delivery that stem from outside sources. These include distance learning courses, vocational educational courses, and online courses

Distance Learning Courses:

Distance learning courses at Dollar Bay have primarily included varying language courses, (Spanish, French, German, and Finish) and drafting. These classes are scheduled through the local intermediate school district. Our school district has a long history of taking advantage of these classes. There are usually a half dozen to a dozen students enrolled in these classes. The class is not only monitored by the distance learning instructor but also our school principal. Any logistical issues are taken care of by the technology director or technology support staff. Our district will continue to make use of distance learning for classes that we do not have an instructor for such as foreign language. We will also watch for other subjects, which may be taught through distance learning that would be advantageous for our students.

On Line Courses - Seat Time Waver – Intervention Programs

Odysseyware is an online educational curriculum that offers a variety of course offerings to students. It is primarily for credit recovery for high school students, as well as supplemental electives for classes that Dollar Bay does not offer. Odysseyware includes courses in the core subjects of social studies and history, math, language arts, and science, as well as a variety of electives. It is available at no cost to our students.

Students in the district who have difficulty functioning in the normal public school environment, have disabilities temporary or permanent, or prefer to be homeschooled will have an option to receive a Seat Time Waver using online courses. Students will register with the school district. Their grades and classes will be monitored by the school disctrict but they will do their work online from home using a state approved online provider.

Read Naturally and Lexia are online reading intervention programs that are used in the district. Read Naturally is used at the K-8 grade level and Lexia is used at the K-12

Electronic Library / Electronic Books

The school is in the exploring stage of being able to check out electronic books from the library which is both a school and public library. Electronic books may be stored on electronic readers which are checked out from the library or read-only electronic files that can be connected to over the Internet.

Curriculum: Parental Communications & Community Relations

There are many avenues whereby the school both communicates with the community and garners input from the community. Annual reports and quarterly newsletters go out regularly. Informational letters go out regularly for awareness and instructions pertaining to special events. The school has recently upgraded its website making it more functional in communicate with the public. The website www.dollarbay.k12.mi.us includes web pages on ;many facets of the school including, academics, sports, organizations, school board activities, etc. There are daily announcements, and numerous monthly and yearly calendars related to events and happenings on the school website.

There are school email accounts available for all staff and related personnel such as school board members. E-mail accounts are visible for all users and easily accessible. Any one can create their own e-mail groups for more efficient communication. This e-mail is used regularly. Some teachers require their students to submit assignments by e-mail. In the near future students will all be given a school email account to further enhance internal communication, the exchange of assignments, and collaboration between staff and students.

The school district makes use of a powerful administrative software package called Power School. All teachers are required to enter their weekly grades and attendance into an electronic grade book. All parents and students are given a user ID and password which allows them access to grades, attendance and other teacher comments. This program also allows the school to generate numerous reports including, progress reports, deficiency reports, athletic progress reports. Teachers can easily access appropriate personal data about students, home address and phone, parent's names, birthdays, and health issues they need to be aware of.

The school is in the planning stages of creating remote access to school files from outside the building. The school is exploring greater use of internet based storage using Google Docs to enhance connectivity to school documents. The school is also exploring the potential for logging in remotely to the school file server using an ID and password.

Curriculum: Collaboration with Adult Literacy Service Providers

Our school district does not provide adult literacy services. Students or community members seeking adult ed courses or general education certificates would be directed by our school councilor to the appropriate community organizations that provide those services.

Professional Development: Strategies

There are several means of delivering professional development as it relates to technology. There is one staff member who works for roughly a half hour per day to help with professional development. This person has a bachelors degree in computer science and teaches the technology classes. He has 27 years experience in education. There is a contracted technology professional through the Copper Country Intermediate School District who is at the school one day per week. In the past his task has been primarily devoted to maintenance of the technology infrastructure. Some restructuring has happened at the Intermediate School District. There is more on line help through a help desk and a program that makes it easier to setup and maintain machine integrity through remote access. This should free up the contracted worker to spend more time working with teaching staff at the school district to enhance the integration of technology in the educational process. Both workers on a weekly basis will intentionally seek out staff members to find out any technology needs. School staff will also be encouraged to initiate requests for help to these two people or from the remote access site at the Intermediate School District.

At the beginning of the school year a survey will be given to the teachers to help assess the needs and interest in various technology tools including, productivity tools, research tools, and communication tools. The will try to determine both the scope and degree to which teacher need help with technology. We will assess how well they know each tool and which tools they would like to learn more about. We will assess how much they currently use technology in the classroom and where they would like to use it more. This survey will be a central tool in planning professional development for the year. It will help determine strong and weak areas. Teachers with similar needs and interests can be grouped together to make more efficient use of time. One on one help will also be made available if necessary.

There are 5 in service days during the course of the school year. Some of these days are broken up into half days. Technology training has been offered in-ouse during many of these days. The technology coordinator will continue to be proactive in using this time to address technology issues. This is especially true for technology issues that are new to everyone or a large group of people. The technology coordinator will also be proactive in making teachers aware of local or state wide workshops that enhance the use of technology in the classroom.

The Intermediate School District provides professional development, sometimes on site in our district, and sometimes from their location in a neighboring town. There is an area wide inservice day that most schools participate in. This allows teacher to attend workshops related to technology and collaborate with other teacher on how they are using technology in the classroom. There are various state wide workshops that teachers may attend to gain exposure or training in areas of technology.

Professional Development: Supporting Resources

The school district is part of a consortium with the Copper Country Intermediate School District. For an annual fee the school district acquires numerous services. These services include the following. The Dollar Bay Technology Coordinator is on the Intermediate School District's Advisory Committee and also attends meetings with the other Technology Coordinators in the area.

Traditional Member Services
- Video Tape Library
- United Streaming Instructional Videos
- Ellison Die Cutters
- Digital Cameras, Projectors, PA system, Document Camera
- REMCAM Bid, Group Purchasing, Summer Computer bid
- Satellite Programming
- Charter Channel 20 Public Relations Channel
- VHS/CD/DVD Duplication
- Poster Printing
- CD/DVD scratch repair
- Workshops/In-Services/Technology consulting

Video Conferencing Services
- Multipoint Conferencing
- Gatekeeper and Scheduling
- Video Firewalling

Internet Service Provider
- Internet/Internet2 Bandwidth
- Backup/Disaster Recovery/Business Continuity
- Virtual Server Hosting
- Shared Servers
- Security (Spam, Web Content, Firewall, Virus, Spyware)
- Web and Email hosting
- Data Warehousing
- Emergency Notification System

Support Network Services
- Onsite help with Server, Networks, Work Stations 7am-5pm daily
- Remote Support/Control with Servers, Networks, Work Stations
- Call in help desk

The school district has a web site which is both informational and gives a snap shot of numerous activates during the year. There are traditional categories in areas like academics, sports, colanders, announcements, and class pictures. In academics and class can have their own web page to highlight activates they are involved in. There is also a category called special events. Any teacher may request a page be made and posted related to special school events. Numerous school policies are posted on this site such as the student handbook, athletic handbook, and electronic use policy. In the future more school policies will be posted here as well.

Infrastructure: Needs, Technical Specifications, Design

The current infrastructure of our school is fairly adequate; especially considering the financial difficulty the school has experience in the recent past. There are a few holes that need addressing. Below is a description of our infrastructure including prominent needs.

Computer Workstations and Accessories

Workstations: There are about 200 workstations on line including student, teacher and support staff. Almost all of these are PC's. Only 5 of the PC's are laptops. The school strategy is to buy 2 year old used machines with a 3 year warranty. These machines still have a significant amount their life cycle left. If machines do fail they are under warranty. If 25-30 machines are purchased per year then the entire collection of workstations will be rotated out every 4 to 5 years. The oldest machines will be 6 to 7 years old. Currently 200 of the workstations have a flat panel. It is the goal of the district to replace all Cathode Ray Tubes with flat monitors as it pays for itself with the energy savings in the course of 1 or 2 years. All workstations come with Windows XP, Microsoft Office Professional suite, Keyboard, Mouse, Sound Card, CD players. The processing speeds and specifications of each machine naturally varies with it's age.

Printers/Copiers: All printers are laser printers. The district believes that the quality, cost, and dependability of these machines make them a better buy then ink jet. Each lower elementary class has their own laser printer. Each lab has it's own laser printer. Each office has its on laser printer. The library has a laser printer. Only two High/Middle school classrooms have their own printer. The rest must print to one of the labs or office. This is a bit of an inconvenience but the budget doesn't easily allow for more. There is a color laser available for the elementary in the elementary computer lab. There is a color laser available for high/middle school teachers in the high/middle school office. Students must have a teacher print out their work if they want it in color to help reduce the cost of unnecessary color printing. There will be a 2 sided color laser printer for the superintendent's office. There is a copier in the high school office. This is attached to the network and teachers can print to from any computer workstation. There is a copier in the superintendent's office.

Scanners: There is one scanner in one of the high school computer labs. One will be purchased for the elementary computer lab and the graphics lab.

Projectors: Every classroom has a compute projector. The library also has a data projector. There are two data projectors that can be placed on mobile carts.

Smart Slates/Document Cameras: All teachers have Smart Slate, data projector and document camera.

DVD/CD Burners: About 90% of PCs have DVD/CD burners

Digital Cameras: The high school lab has 10 cameras that be used for pictures and and video. These can be checked out for class projects. Teachers are encouraged to have students use pictures and video in school projects. They are used extensively with some classes such as Publications which works daily on the yearbook and webpages. All of the elementary teachers have their own digital cameras and a camera will be purchased for all remaining teachers in the coming school year.

Video Camera: The district has two video cameras, which play to small tape. These cameras can be downloaded to any machine in the Macintosh Lab. Currently they can only be downloaded to 1 PC workstation in the high/middle school lab. Cameras
.

Below is layout as to the location of computer workstations and accessory equipment.

Lower Elementary Classrooms
1 Teacher PC Station
4 Student PC Station
1 Laser Printer, projector, document camera, Smart Slate

Upper Elementary Classrooms
1 Teacher PC Station
4 Student PC Station
1 Laser Printer, projector, document camera, Smart Slate

Elementary Lab
1 Teacher Station
28 PC Station
1 Color Laser Printer, Non color laser printer, projector, document camera, Smart Board

Mini Lab Work Room
6 Student PC Station

High/Middle School Classrooms
1 Teacher PC
1 Laser Printer, projector, document camera, Smart Slate

Science Classroom contains 4 Student PC stations and 1 laser printer
Special Ed room contains 2 Student PC stations and 1 laser printer
Gym teacher has a Laptop PC and 1 color laser printer

High/Middle School Lab #1
25 Student PC Station
1 Laser Printer, projector, document camera, Smart Slate, scanner
2 video cameras
* This lab is used as a technology classroom and is not always available for other classes.

High/Middle School Overflow Lab
16 Student PC Stations

High/Middle School Graphics Lab
28 Student PC Stations
1 Smart Board, projector, document camera

Library
1 Librarian PC Station
6 Student PC Stations
1 Laser Printer
1 Laser Printer, projector, document camera, Smart Slate, scanner

Distance Learning Room
5 Student PC Stations
1 Poly Com Camera
1 55-inch LCD TV
1 plotter, laser printer, document camera, 55 inch LCD monitor

Councilors Office
1 Councilor PC Station
3 Student PC Stations

High School Office
2 Principal PC Laptop
1 Secretary PC Station
1 Color Laser Printer
1 Black/White Laser Printer
2 Copy Machines (network accessible)

Superintendent Office
1 Superintendent PC Laptop
2 Secretary PC Laptop
1 Color Laser Printer
1 Copy machine

Network Infrastructure

File Server: The school district has a central file server. The file server stores data for all students and staff in the district. The file stores the school website which is visible internally and externally. The file server also acts as a print server to distribute printouts to requested printers. The file server was purchased in the previous school year.

Wiring: In 1997-98 the entire building was rewired during the addition and renovation project. Every room in the building has 4 to 8 drops of 10/100 category 5 twisted pair. Most locations also have at least one phone line drop and a cable television drop. Drops are typically grouped in the front and back of each room. A central wiring closet has up to the date switches. All drops have a live connection to a patch panel, which has a life connection to a switch. Both new computer labs were wired with category 5 twisted pair before the 2010 school year.

Wireless Access: The district has several airports throughout the highs school that allow wireless connection with the right ID and password.

Internet/Email Access: A fiber optic line connects us to the Copper Country Intermediate School District which contracts with Michigan Technological University to share a 75MB line for Internet access. This provides significant band width and adequate speed. All staff have a Dollar Bay Gmail account. In the near future all students will be given a Dollar Bay Gmail account

Security: The Copper Country Intermediate School District provides protection from the following: inappropriate web content, spam email, viruses, spyware, firewall cracking. The ISD is moving to a state of the art program, Fortigate, which monitors usage and blocks inappropriate usage. This program allows for customization of content by our local school district. Weekly reports will be generated and examined to determine the use and misuse of the Internet. The district uses a program called Kace to maintain and update workstations. The district also uses software to allow workstations to be locked in such a way that student changes automatically revert to original settings.

Data Security: The file server is backed up in 2 ways. The hard drives use striping across several drives so that data can be rebuilt if part of the drive crashes. Also nightly backups are done at the Intermediate School District. The file server has an uninterrupted power supply in case of power failure.

Monitoring: A program called Italc will be installed on teacher machines, which allow them to view student screens in their class or a remote lab. This program can be used to both help a student in need but remotely taking over the machine or to monitor usage. Teachers are instructed to physically monitor any students in their own classroom who are using technology to make sure they are productive and using it appropriately.

Software

Operating System: All of the Macintosh machines are using Mac OS X. All of the PC's are using or moving to Windows XP.

Productivity Software: All of our workstations have Office Professional 2010, which includes Word, Excel/Graphing, Access, Publisher, and Power Point.

Browsers: Internet Explorer, Firefox, and Chrome is installed on all computers. Internet Explorer and Firefox are installed because they are the most common browsers used.

Video Software: Video is one of the applications that the school district will be more aggressively integrating into the classroom. All of the Macintosh machines have I-Movie. All of the PC's with Windows XP have Movie Maker.

Graphical Software: A number of programs for working with graphics will be available including Paint, Windows. Adobe Suite is installed on all computers in the Graphics Lab.

Programming Software: The QBASIC package will be on all machines as it is free. 5 copies of both Visual Basic and C++ will be installed in the High/Middle school lab for use in classes.

Classroom Software: Programs which are used in particular classrooms will be installed as appropriate. If the program is free it will be installed on all machines. If the program requires licenses then it will be installed only the appropriate number of machines. The CAD program for drafting and the new Notation software for Music Appreciation are examples of programs that have limited licenses and will be installed on strategic work stations. Notebook software which comes with Smart Slate is installed on all computers.

Administrative Software: The school district will pay annual fees to use Power School as it's administrative software. Power School allows a comprehensive student data base. Power School is the electronic grade book, which teachers use to keep grades and attendance.

Maintenance

There is one person on staff who works roughly one half hour per day to help maintain hardware and software are working. A second person is contracted through the Intermediate school district to be in the school one day per week. These two will be proactive in discovering needs and problems on a weekly basis. Staff can also initiate contacting these two with needs or problems the are having. There is also a help desk at the Intermediate School District. The help desk can be contacted and staff can be helped remotely by gaining access to local machines.

Attempts will be made to purchase quality equipment at affordable prices. Workstations will be purchased with 3 year warranties' to help quickly replace equipment and parts that fail. The district will keep a few workstations as extras to temporarily replace workstations that fail and are being fixed or replaced.

Future Plans for Improvement

Continued implementation & evaluation of recent upgrade of Smart Boards, Smart Slates, Notebook software, Graphics related courses using Adobe suite

Electronic Books: The district is in the initial stages of exploring the use of electronic books that can be checked out from the library or accessed online

Remote access: Exploration is being done on remote access so that students and staff could access files from home by logging in to the file server

Teleconferencing: Exploration is being done on using teleconferencing to collaborate with other schools or institutions to enhance education process

Additional Smart Boards in classrooms

IPads for upper level students

Infrastructure: Increased Access

There are 4 student stations available in every lower elementary classroom. Four student stations are available in every upper elementary classroom. All high school and middle school classes have a teacher workstation that is made available to the students at the teacher's discretion. Several high school and middle school classes have several student stations. There is an elementary lab of 30 computers available. There are 3 high school labs available containing 25, 28 and 16 computers. There is well over 200 computers available to students, which is a ratio of two computer per 3 students. No student is disadvantaged based on his or her social or economic status.

We have no students with significant physical handicaps. Even if we did all of our building is handicap accessible. If any student arrived or became physically disabled we would purchase the necessary infrastructure to accommodate such student.

Funding and Budget: Budget and Timetables

The Dollar Bay School District has been on a tight budget for the past 3 year as they had been operating a fund deficit for several years. They have recently been successful in getting out of debt but not very far out of debt. They need to establish more significant fund equity. Despite the tight budgets, technology is doing well in the district as indicated in the previous sections on infrastructure. It is difficult to project too far into the future with certainty. However the following are items that the School Board plans to spend to maintain, update, and improve a good technology program that ensures technology is integrated in to the educational process.

	2011-12	2012-13	2013-14
Salary & Benefits Technology Coordinator	$2,275	$2,275	$2,275
Support Personnel through ISD	$22,868	$22,868	$22,868
Support Services through ISD	$3,200	$3,200	$3,200
Hardware and Networking Costs	$3100	$8,500	$8,500
Maintenance and Service Costs	$2,750	$2,750	$2,750
License Agreements	$3,000	$3,000	$3,000
Software and Curriculum Support	$3,000	$3,000	$3,000
Professional Development	$725	$725	$725
Totals	$44,053	$44,053	$44,053

Salary and Benefits for the Technology Coordinator is monies paid to the on staff person for roughly one hour a day of service.

Technical support through the ISD includes the cost of a technician who comes once a week plus other services that the ISD provides listed in section 10 on supporting resources.

Hardware and network costs include the cost of some miscellaneous equipment the first year: projectors, 2 sided color laser printer, scanners, musical keyboards, that can be connected to a computer, cameras for distance learning. The monies for the remaining 2 years is to replace ageing equipment. We will replace 20 to 25 computers those two years.

Maintenance and service costs include monies for equipment other than system units and monitors that are not under warranty and need to be replaced or serviced.

License agreement monies will go towards purchasing an upgrade of the office suite for all computers in the district. It will be phased in over a three year period.

Software and curriculum support is for the administrative software and accompanying electronic grade book. The first year there is an upgrade fee plus annual support fee. The following years there is only an annual support fee.

Professional development fees are miscellaneous fees towards professional development. The major cost for professional development is in the cost of the Technology Coordinator and the cost of the technician resourced through the Intermediate School District.

Funding and Budgeting: Coordination of State and Local Resources

The school district is part of a consortium with the Copper Country Intermediate School District. The Dollar Bay Technology Coordinator is on the Intermediate School District's Advisory Committee and also attends meetings with the other Technology Coordinators in the area. Through the consortium the district is kept up to date on major changes, innovations, grants and funding available to schools. The Copper Country Intermediate School District also maintains the REMC 1 bid list, which typically makes technology items available at a lower cost to schools.

The school district regularly examines items that are available using USF funds. Being an at risk district significantly reduces the costs of items that can be purchased or reimbursed through USF monies.

The school district is also tuned into regular channels of communication from state and federal agencies. The school district will pursue any and all such programs that they see as advantageous to furthering the integration of technology into the educational process.

Monitoring and Evaluation

Yearly goals in integrating technology into the classroom will be discussed regularly in staff meetings. The technology coordinator and support personnel will weekly or bi-weekly contact staff individually to check on progress and query any needed support, maintenance, or training. Teachers are encouraged to e-mail the local technology coordinator or support personnel from the Intermediate School District if they are in need of help.

A technology team made up of 2 elementary teachers, 2 high school teachers, the technology coordinator, and support personnel from the Intermediate School District, and the principal will meet at least quarterly. Progress concerning yearly goals and problems areas will be addressed. New and innovative ideas will be discussed and brainstormed.

In the beginning of the third trimester a comprehensive survey will be given to all teachers and staff. The survey will query needed improvements in hardware, software, training, and maintenance of technology. Most questions will be scaled from 1 to 5, very low to very high, to help see where improvements are needed and to what degree. The results of the survey will be reviewed by the Technology Team and used to make future plans to purchase the necessary technology components as well and to make future plans in the area of training and maintenance.

Electronic Resource Use Policy

Dollar Bay-Tamarack City Area Schools have a variety of electronic resources and access to the Internet available for educational and informational purposes.

The Internet is a vast network of computer networks linking thousands of computers around the world used by educators, business, the government, the military, and other organizations. In schools and libraries it can be used to educate and inform the same way as learning resources such as books, magazines, videos, CD-ROM, and other informational sources. Students and staff can use the Internet to communicate with other schools, colleges and organizations and participate in distance learning activities. They are able to consult with experts; locate material; research subjects; learn concepts; meet their informational needs. Because the Internet is a constantly changing environment it is impossible to predict with certainty what information students may locate. It is essential for each user of the Internet to recognize his/her responsibility in having access to vast services, sites, systems and people. The user is ultimately responsible for his/her actions in accessing the Internet.

Institutional Rights and Responsibilities

-Dollar Bay-Tamarack City Area Schools has the right to allocate resources in accordance with our District Mission Policy.
-Dollar Bay- Tamarack City Area Schools has the right to establish policies and procedures, which govern the use and security of electronic resources. This may include disciplinary restriction of computer access.
-Dollar Bay-Tamarack City Area Schools has the right to review files to restore system integrity and to insure that the system is being used responsibly.
-Dollar Bay-Tamarack City Area Schools has a responsibility to respect the privacy of individuals whenever possible.
-Dollar Bay-Tamarack City Area Schools has a responsibility to provide equal access to all users of electronic data.
-Dollar Bay-Tamarack City Area Schools has a responsibility to train and support students and staff to effectively use information technology.

Individual Rights and Responsibilities

-Users access to electronic resources shall not be denied without just case.
-All users have ownership rights over their own intellectual works.
-All users have the right to be informed of policies pertaining to the use of electronic resources.
-Each user is responsible for refraining from acts that waste time and resources or prevent others from using them.
-Each user is responsible for respecting the rights of privacy of other users; respecting the equipment, respecting the diversity of opinions; avoiding abusive language and complying with legal restrictions regarding the use of information resources as outlined in the Users Agreement and Code of Conduct.
-Each user will be required to read and understand the policies and procedures required by this

school
-District pertaining to the use of electronic resources.

Users Agreement and Code of Conduct

Dollar Bay-Tamarack City Area Schools provide access to a wide collection of electronic resources. This agreement sets forth the conditions for the use of these resources. One of these resources is the Internet. The Internet links computer networks around the world giving users in our school district access to a wide variety of computer and information resources. In general, electronic traffic passes freely in a trusting atmosphere with a minimum of constraints. Dollar Bay-Tamarack City Area Schools provide open access to these local, national and international sources of information and collaboration vital to intellectual inquiry in a democracy. The Internet is defined as an extension of the library's resources and every user has rights and responsibilities, including the responsibility to respect and protect the rights of other users in our community and on the Internet. Users are expected to act in a responsible, ethical and legal manner in accordance with both the school and the library mission statements, code of conduct, policies of network access providers, and State and Federal laws.

All users of electronic resources in the Dollar Bay-Tamarack City Area schools will be held responsible for their actions and activity. Unacceptable uses of these resources will result in the suspension or revoking of these privileges. Some examples of such unacceptable use include, but are not limited to:

1. Using the electronic resources for illegal activity, including violation of copyright or other contracts, harassment or plagiarism.
2. Using the electronic resources of our school district for financial or commercial gain.
3. Degrading or disrupting equipment or system performance.
4. Vandalizing data of another user.
5. Wastefully using finite resources.
6. Gaining unauthorized access to resources or entities.
7. Invading the privacy of individuals.
8. Using an account owned by another user.
9. Posting personal communications without the original author's consent.
10. Posting anonymous messages or messages of a derogatory nature.
11. The knowing or inadvertent spread of computer viruses.
12. Deliberately sending, retrieving, or displaying, text or graphics which may reasonably be construed as obscene or abusive.

Disciplinary Action

Discipline will be based on the severity and frequency of the offense.

1. A student/user may be suspended from all computer equipment at the Dollar Bay- Tamarack City Area Schools for a period of up to one year.
2. A student/user may be required to make full financial restitution.
3. A student/user may be banned from access to the Internet.

4. A student may be suspended from school.
5. A student/user may be denied use of school and library computers.

I, the undersigned, understand and abide by the Dollar Bay-Tamarack City Area Schools Users Agreement and Code of Conduct for electronic resources. I further understand that any violation of the policies above is unauthorized, unethical and may constitute a criminal offense. Should I commit any violation, my access privileges may be revoked, and disciplinary action and/or appropriate legal action may be taken.

Student/User Signature _____ Date_____

_____YES, I grant permission for my daughter or son to access networked computer services such as electronic mail and the Internet. I understand that some materials on the Internet may be objectionable, and accept the responsibility for guidance of Internet use for my child to follow when selecting, sharing, or exploring information and media.

Parent Signature _____ Date _____

Dollar Bay Tamarack City Area Schools
P.O. Box 371, 48475 Maple Drive
Dollar Bay, MI 49922
Phone 906 482-5800
Jan Quarless
July 1, 2011

31100

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Copper Country ISD
June 30, 2014

Technology Plan Contact
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Technology Instructor/Coordinator

URL
www.dollarbay.k12.mi.us/DistrictInformation/Technology/TechnologyPlan/techplan.htm