

Technology Plan

School District of the City of River Rouge

July 1, 2006 – June 30, 2009



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Section 2. Introductory Material

MISSION STATEMENT

The mission of the River Rouge School District, in partnership with home and community, is to provide our students with opportunities to become productive, caring members of a changing society through self-discipline and lifelong learning.

INTRODUCTION

One hundred children were enrolled in the preschool program and twenty-five 2 _-3 year old children were also enrolled in the preschool program.

We have approximately 1900 students enrolled in three elementary schools and one middle school/high school. The school district has an 84% poverty rate as based on the free and reduced lunch formula. The student population is approximately 70% African American, 20% White, 3% Hispanic and 2% Multi Ethnic.

There are 135 professional staff of which 32% have a bachelor's degree, 55% have a master's degree, and 13% have a second masters or education specialist degree. Seventeen percent of the staff have 20 years or more in the district, 37% between 10 and 20 years, and 46% have less than 10 years experience in the system. The average staff member has approximately 11 years of professional experience.

The School District of the City of River Rouge
1460 West Coolidge Hwy
River Rouge, Michigan 48218
313 297-9600
www.resa.net/riverrouge

Superintendent: Marie M. Miller
313 297-9600 ext.1623
Offices are located at River Rouge High School (RRHS)

River Rouge High School
1460 West Coolidge Hwy.
Principal: Rosa Benford
Assistant Principal: Roy Harris
Grades: 8th – 12th

Clarence B. Sabbath Elementary
340 Frazier Street
Principal: Dolores Reid
Adm. Assistant:
Grades: 5th – 7th

Ann Visger Primary
11121 West Jefferson
Principal: Tammy Hubbard
Adm. Assistant: Barbara DuRei
Grades: 2nd- 4th

Walter F. White Preprimary
550 Eaton Street
Principal: Rosalyn Glavin
Adm. Assistant: Claudia Chester
Grades: Nursery School (30 months) -
1st Grade – Latchkey Site

Technology Planning Team:

River Rouge High School
Glen Reid Jr. Technology Department
Carolyn Collins, Computer Applications Teacher/METS

Sabbath Elementary
David Kocbus, 5th Grade Teacher/METS

Ann Visger Primary
Tammy Hubbard, Principal/Zangle

Walter White Preprimary
Sabrina Rudy, Kindergarten Teacher
Roselyn Glavin, Principal/METS

Technology Review Committee:

Marie M. Miller, Superintendent/Director of Technology

Marcella Cora, Secretary – River Rouge Board of Education

Dr. Ingrid Wilson-Johnson, Trustee – River Rouge Board of Education

Derek J. Perry - Parent

Consultants:

David Frankle RESA Technology Department

Joseph Agus AT&T Technology Engineer

Section 3. Vision and Goals

River Rouge School District Technology Vision Statement

The mission of the River Rouge School District is to provide developmentally appropriate learning experiences which emphasize each individual's unique potential and responsibilities in a safe, affirming environment, in preparation for meeting the complex challenges of a rapidly changing world.

Technology is the catalyst that transforms River Rouge schools from what they are now into what they must become to meet our children's needs as they grow into productive 21st century adults. River Rouge School District trains students and their teachers to gather information, interpret the information, and transform it into the power of knowledge using technology.

In River Rouge classrooms, technology:

- Is an integral part of the instructional process;
- Tools enhance learning;
- Helps integrate curriculum;
- Equalizes the opportunity and achievement gap of a population of students from diverse socio-economic backgrounds;
- Prepares students for the future world dependent upon technology;
- Serves as a vehicle to help teachers deliver a variety of learning opportunities to students in many disciplines or subject areas.

River Rouge teachers skillfully utilize technology to:

- Create engaging learning environments for all of their students;
- Support the development of process skills such as flexibility, adaptability, critical thinking, problem solving and collaboration which are essential to success in a rapidly changing information age;
- Serve the diverse learning styles of their students and educate them for a wider range of intelligences (e.g., verbal/linguistic, logical/mathematical, visual/spatial, bodily/kinesthetic, musical, interpersonal, and intrapersonal);
- Gain reliable and valid data concerning student achievement;
- Provide meaningful feedback to parents, other teachers, administration and the school board concerning student achievement;
- Improve their personal instructional skills.

In River Rouge School District technology improves:

- District internal and external communication
- Administrative and classroom management;
- Enhances the daily reporting requirements of the school district.

River Rouge School District Learning Goals

What learning will River Rouge students attain? River Rouge staff will work diligently to help ALL students be lifelong learners who are:

- Responsible for their own learning;
- Skilled in accessing and processing information; confident in meeting METS;
- Able to solve complex problems alone or collaboratively;
- Capable of being creative and innovative;
- Able to communicate locally, nationally, and globally.

River Rouge School District will support technology by providing each K-12 regular, special education and specialized classroom with the technology hardware, software technical support, and training to maximize student learning.

The School Board will support the teachers' work by allocating the funds to provide the equipment necessary for optimal student achievement. They will support the time and incentives necessary for teachers to learn the skills required to guide students to optimal success.

The school district administration will hold the staff accountable to work with students to achieve their learning goals. The administration will team across the district to provide an efficient staff development plan for assisting staff in attaining the skills necessary to be effective in the classroom. The administration will team across the district to coordinate acquisition of technology. They will work to insure equitable access and usage of technology across the district and across various student populations.

The administration and staff will work with parents and the community to enhance the technological learning environment for students. The School Board, administration and staff will strive for optimal community support of technology acquisition and usage of technology for River Rouge students.

River Rouge students will meet the challenges of the rapidly changing electronic information society by having in their classrooms, their libraries and computer labs the most up-to-date technology possible.

Section 4. Curriculum Integration

The classroom teacher the majority of the time and in any special classes that the children will have will do Curriculum Integration of the METS at the Elementary School level. The forms of assessment to be used are observation, class projects, student portfolio, and formal assessment at the end of second grade and at the end of fifth grade.

The Middle School/High School METS integrated in the curriculum in all classrooms. Below is an example where the curriculum integration will take place.

EARLY ELEMENTARY

Tech Area	METS Description	Who/ Where Taught	Project / Activity/ Sites
Basic Operations and Concepts	Understand that people use many types of technologies in their daily lives (e.g., computers, cameras, audio/visual players, phones, televisions).	K-2 classroom	Class discussion
	Identify common uses of technology found in daily life.	K-2 classroom	observation/assessment
	Recognize, name and will be able to label the major hardware components in a computer system(e.g., computer, monitor, keyboard, mouse and printer).	K-2 classroom	observation/assessment
	Identify the functions of the major hardware components in a computer system.	K-2 classroom	observation/assessment
	Discuss the basic care of computer hardware and various media types(e.g., diskettes, CDs, DVDs, videotapes)	K-2 classroom	model/observe
	Use various age-appropriate technologies for gathering information (e.g., dictionaries, encyclopedias, audio/video players, phones, web resources).	K-2 classroom	nettrekker/
	Use a variety of age-appropriate Technologies for sharing information (e.g., drawing a picture, writing a story)	K-2 classroom	<i>Orly's Draw a Story</i>

	Recognize the functions of basic file menu commands (e.g. new, open, close, save, print)	K-2 classroom	<i>Orly's Draw a Story</i>
	Proofread and edit their writing using appropriate resources including dictionaries and a class developed checklist both individually and as a group.	K-2 classroom	Appleworks
Social, Ethical and Human Issues	Identify common uses of information and communication technologies.	K-2 classroom	discussion/powerpoint
	Discuss advantages and disadvantages of using technology.	K-2 classroom	it doesn't always work
	Recognize that using a password helps protect the privacy of information.	K-2 classroom	password on classroom computers
	Discuss scenarios describing acceptable and unacceptable uses of age-appropriate technology(e.g., computers, phones, 911, internet, e-mail) at home or at school.	K-2 classroom	Fire station visit. Class discussion.
	Discuss the consequences of irresponsible uses of technology resources at home or at school.	K-2 classroom	dialing 911 as a prank Discussion of consequences
	Understand that technology is a tool to help complete a task.	K-2 classroom	How can we find out?
	Understand that technology is a source of information, learning, and entertainment.	K-2 classroom	compare contrast gameboy, ipod,learnport/computer, leap pads
Technology Productivity Tools	Know how to use a variety of productivity software (e.g., word processors, drawing tools, presentation software) to convey ideas and illustrate concepts.	K-2 classroom	make a card with illustrations and poems
	Be able to recognize the best type of software to use.	K-2 classroom	
	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.	K-2 classroom	group projects
Technology Communication Tools	Identify procedures for safely using basic telecommunication tools (e.g., e-mail, phones) with assistance from teachers, parents, or student partners.	K-2 classroom	classroom projects

	Know how to use age-appropriate media (e.g., presentation software, newsletters, word processors) to communicate ideas to classmates, families and others.	K-2 classroom	<i>Orly's Draw a Story</i> <i>Bailey's Book House</i>
	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.	K-2 classroom	nettrekker and more
Technology Research Tools	Know how to recognize the Web browser and associate it with accessing resources on the internet.	K-2 classroom	Animal Research report
	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.	K-2 classroom	Animal Research report
	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.	K-2 classroom	Animal Research report
	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.	K-2 classroom	Animal Research report
Technology Problem-Solving and Decision-Making Tools	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.	K-2 classroom	group problem solving projects
	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.	K-2 classroom	google earth

LATE ELEMENTARY

Tech Area	METS Description	Who/Where Taught	Project / Activity/ Sites
Basic Operations and Concepts	Discuss ways technology has changed life at school and at home.	classroom	discussion
	Discuss ways technology has changed business and government over the years.	computer lab	pod teams
	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.	computer lab	Stories in the news group project
	Know how to use basic input/output devices and other peripherals (e.g., scanners, digital cameras, video projectors).	Class Newsletter	add to newspaper
	Know proper keyboarding positions and touch-typing techniques.	computer lab	block out keyboard
	Manage and maintain files on a hard drive or the network.	classroom	class project
	Demonstrate proper care in the use of hardware, software, peripherals, and storage media.	classroom	monitor/demo
	Know how to exchange files with other students using technology (e.g., e-mail attachments, network file sharing, diskettes, flash drives).	classroom/lab	classroom email
	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.	computer lab	detroitgascom video streaming
	Identify search strategies for locating needed information on the internet.	lab/classroom	learnport
	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.	classroom	document using word
Social, Ethical, and Human Issues	Identify cultural and societal issues relating to technology.	classroom	computer in bedroom vs. computer in kitchen
	Discuss how information and communication technology	classroom	Friends of the Rouge project

	supports collaboration, productivity, and lifelong learning.		
	Discuss how various assistive technologies can benefit individuals with disabilities.	classroom	Discussion
	Discuss the accuracy, relevance, appropriateness, and bias of electronic information sources.	classroom	Rating the information provider
	Discuss scenarios describing acceptable and unacceptable uses of technology (e.g., copyright, privacy, file sharing, spam, viruses, plagiarism) and related laws.	classroom	BurningCDs/ipods
	Use age-appropriate citing of sources for electronic reports.	classroom	net trekker
	Identify appropriate kinds of information that should be shared in public chat rooms.	classroom	discussion
	Identify safety precautions that should be taken while on-line.	classroom	discussion
	Explore various technology resources that could assist in pursuing personal goals.	classroom	interviews/pods
	Identify technology resources and describe how those resources improve the ability to communicate, increase productivity, or help achieve personal goals.	computer lab	electronic banking
Technology Productivity Tools	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).	computer lab	student biography
	Know how to insert various objects (e.g., photos, graphics, sound, video) into word processing documents, presentations, or web documents.	computer lab	design a web site RIF
	Use a variety of technology tools and applications to promote creativity.	computer lab	design a web site RIF
	Understand that existing (and future) technologies are the result of human creativity.	computer lab	research Apple computers and Microsoft
	Collaborate with classmates using a variety of technology tools to plan, organize, and create a web project.	computer lab	design a web site RIF

Technology Communication Tools	Use basic telecommunication tools(e.g., e-mail, WebQuests, IM, chat rooms, web conferencing) for collaborative projects with other students.	computer lab	Friends of the Rouge sister sites
	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.	computer lab	design a web site RIF
	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).	classroom	map to their house with power point
Technology Research Tools	Use Web search engines and built-in search functions of other various resources to locate information.	Class Newsletter	compare and contrast Google and Nettekker group projects
	Describe basic guidelines for determining the validity of information accessed from various sources (e.g., web site, dictionary, on-line newspaper, CD-ROM).	computer lab	Rate the Site check list
	Know how to independently use existing databases (e.g., library catalogs, electronic dictionaries, encyclopedias) to locate, sort, and interpret information on an assigned topic.	computer lab	team project
	Perform simple queries on existing databases and report results on an assigned topic.	computer lab	water quality
	Identify appropriate technology tools and resources by evaluating the accuracy, appropriateness, and bias of the resource.	computer lab	Rate the Site Check list
	Compare and contrast the functions and capabilities of the word processor, database, and spreadsheet for gathering data, processing data, performing calculations, and reporting results.	computer lab	Measuring pH in H ₂ O over a period of time
Technology Problem-Solving and Decision- Making Tools	Use technology resources to access information that can assist in making informed decisions about everyday matters (e.g., which movie to	computer lab	foogle.com

	see, which product to purchase).		
	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).	computer lab	water temp. too hot/cold to support benthics

MIDDLE SCHOOL/HIGH SCHOOL

Tech Area	METS Description	Who/Where Taught	Project Activity Sites
Basic Operations and Concepts	Use proper keyboarding posture, finger positions, and touch-typing techniques to improve accuracy, speed and general efficiency in operating a computer	Posture - Computer Class - Collins	Rubric & Observation
	Use appropriate technology terminology	Collins/Computer Class	Classroom Projects/ Assignments/ Resources WebQuest - Add
	Use a variety of technology tools (e.g. dictionary, thesaurus, calculator, grammar and spell check) to maximize the accuracy of technology-produced products	Collins/Computer Class	Career Prep - Research Project Classroom Assignments
	Understand that new technology tools can be developed to do what could not be done without the use of technology	Fitzpatrick/Science	Science Labs
	Describe strategies for identifying and preventing routine hardware and software problems that may occur during everyday technology use	Collins/Reid Computer Class-Add	Tech Prep Projects
	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)	Computer Class - Add	Changing Tech Prep and Projects – Add Compare/Contrast Computers used since 1 st grade
	Discuss common hardware and software difficulties and identify strategies for trouble-shooting and problem-solving	Reid - Computer Class - Add	Changing Tech Prep and Projects - Add
	Identify characteristics that suggest that the computer system hardware or software might need to be upgrade	Computer Class – Add - Reid	Tech Prep and Projects - Add Microsoft

	Identify a variety of information storage devices (e.g. floppies, CDs, DVDs, flash drives, tapes) and provide a rationale for using a certain device for a specific purpose	All Classes	NASA/White House Site
	Identify technology resources that assist with various consumer-related activities (e.g. budgets, purchases, banking transactions, product descriptions)	Computer Class	Pizza Party Excel Project Stock Summary Report Party Time Excel Project Coca-Cola Shares Project
	Identify appropriate file formats for a variety of applications	Computer Class	Computer Class Projects
	Use basic utility programs or built-in application functions to convert file formats		
	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	Computer/English Class	Classroom Assignments ELA Papers Country Research Project
Social, Ethical, and Human Issues	Understand the potential risks and dangers associated with on-line communications	Acceptable use policy - Add	Online Communication Projects Newspaper Headlines/On-line
	Identify security issues related to e-commerce		
	Discuss issues related to acceptable and responsible use of technology (e.g. privacy, security, copyright, plagiarism, spam, viruses, file-sharing)	Music Class/Government Class/Computer Class	Music Current Events Piracy Activity
	Describe possible consequences and costs related to unethical use of information and communication technologies	Government/Computer Class	Online Communication Projects
	Discuss the societal impact of technology in the future	Science	Google.earth
	Provide accurate citations when referencing information from outside sources in electronic reports	Computer/English Class	Classroom Assignments ELA Papers Country Research Project
	Use technology to identify and explore various occupations or careers	Computer Class Social Studies	Fridays/CareerPrep.Ford/IKEA
	Discuss possible uses of technology (present and future) to support personal pursuits and lifelong learning	Computer Class Social Studies	Career Prep
	Identify uses of technology to support communication with peers, family, or school personnel		Online Communication Projects
Technology Productivity Tools	Apply common software features (e.g., thesaurus formulas, charts, graphics, sounds) to enhance communication and to support creativity	Computer Class Social Studies	Career Prep Excel Projects
	Use a variety of technology resources, including the internet, to increase learning and productivity	Computer Class Social Studies	Career Prep

	Explore basic applications that promote creativity (e.g. graphics, presentation, photo-editing, programming, video-editing)	Science Classes/ Multi Media Class/ Computer Class	Atomic Learning pages.google.com
	Use available utilities for editing pictures, images, or charts	Computer Class Social Studies	Career Prep - Computer Class Projects
	Use collaborative tools to design, develop, and enhance materials, publications, presentations	Computer Class Social Studies	Career Prep
Technology Communications Tools	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	Science	Water Quality Project/Friends of the Rouge/Online Communication Projects
	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	Science Classes/Multi Media Class/Computer Class	Video Streaming
Tech Research Tools	Use a variety of web search engines to locate information	Computer Class/ Media Center/ - Social Studies	Froggle.google.com Resources WebQuest - Add
	Evaluate information from various online resources for accuracy, bias, appropriateness, and comprehensiveness	Computer Class/ Media Center/ - Add Social Studies	Add – Newspaper sties – Encyclopedia sites – University sties
	Identify types of internet sites based on their domain names (e.g., edu, com, org, gov, au)	Computer Class/ Media Center/ - Add Social Studies	mich.edu/mich.gov Webquest
	Know how to create and populate a database	Computer Class - Add	Access Projects
	Perform queries on existing databases	Computer Class - Add	Access Projects
	Know how to create and modify a simple database report	Computer Class - Add	Access Projects - Add
	Evaluate new technology tools and resources and determine the most appropriate tool to use for accomplishing a specific task	Computer Class/ Media Center/ - Add Social Studies	Learnport.nettrecker. Career Prep Resources WebQuest-Add google.earth
Technology Problem-Solving and Decision-Making Tools	Use database or spreadsheet information to make predictions, develop strategies, and evaluate decisions to assist with solving a basic problem	Computer Class	Access Projects - Stock Market Activity

	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	Computer Class	Pizza Party Excel Project Stock Summary Report Party Time Excel Project Coca-Cola Shares Project Budget Activity
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Section 5. Student Achievement

Teachers will focus on helping children become technologically capable students who can navigate a wide variety of technology information sources, think critically about information and data to solve problems, create knowledge from the information they have gathered, communicate what they have learned effectively with the appropriate tools for their purpose and audience, utilize technology with ease and participate in the world as a responsible citizen, worker, learner, community and family member in a technological world. Under the guidelines of NCLB all Students in River Rouge School District will use technology to communicate more effectively, to solve simple and complex problems, increase their productivity, learn about and prepare for the world of work.

Section 6. Technology Delivery

On-line advanced placement courses will start to be offered in the 2006-2007 school year via Virtual High School. The district recognizes the need to offer distance learning classes to best meet the needs of our students.

The student who receives a diploma in the district will use technology to:

- Assist them in communicating effectively and creatively;
- Access and retrieve, to interpret and evaluate visual and auditory information;
- Communicate visually, graphically and artistically through multi-media presentations;
- Communicate through networks and telecommunication;
- Know where to get assistance pertaining to care and operation of the specific technology they utilize;
- Communicate ethically and responsibly

Section 7. Parental Communications & Community Relations

Parents will be aware of the tech plan via the school district website, open house, annual report and teacher meetings. Parents will take a more active role as we evaluate our yearly assessment of the tech plan.

Section 8. Collaboration

The district is contemplating opening an alternative/GED facility in the fall of 2006.

Section 9: Professional Development

Staff will have three consecutive professional days before the official September 5, 2006 opening. Each day the teachers will have two hours of introductions into websites that will jump start the technology learning process.

The staff will first be introduced to sites that they would use in their everyday lives e.g: Detroit Gas Price.com and Froogle.google.com Sites that will be introduced by Wayne RESA. Staff will be Video Streaming.com, Mel.org, procrest.org, Learnport.nettrecker, atomiclearning.com, pages.google.com. Make use of RESA professional development summer and fall planner for strengthening skills.

Teachers will integrate these learning curricula into meeting METS, MEAP, ISTE. This will be the plan for each of the three years. The newly acquired technological research and communication tools, will help students with problem solving, productivity and decision making. Professional Development three days before the start of school with the introduction of the new sites, tools, and equipment will be fresh in the teachers mind. They will be able to put to use the new knowledge right away.

From past experience we have learned that if you can get the teachers on board by showing them how it will benefit their daily lives, they will then in turn see the value of the new technology. Thus, they pass on the knowledge to the students. One Tuesday afternoon each month will be spent sharing integration ideas, sites with follow grade level teachers.

Philosophy

We believe that a well-planned, ongoing and well-funded professional development plan is a crucial part of the district technology plan. Well-trained teaching staff is the key to

successful implementation of this plan whose goal is to promote student achievement. Professional development in the 21st century requires a new approach and new resources. Teachers will be polled once a month to identify professional development needs. We will then establish our approach to best meet their needs.

Goal

To implement a plan that will continually support teachers as they identify and apply technology throughout the school community.

Strategies:

A successful technology training model involves activities designed to move people to ever higher levels of involvement. Our list of activities recognizes that teachers will continue to learn as they see a direct relationship between what they are learning and life in their classrooms. Professional development and support must also remain flexible and closely tied to the curriculum.

- 1) Provide multiple opportunities for professional development through school website, online courses, out-of school workshops, such as RESA, Weblogs, live journals, I-Pods, PDAS, wireless and others as technology moves ahead.
- 2) Offer district workshops before the school year, during and outside of the school day.
- 3) Educate teachers on National Standards.
- 4) Provide incentives to participate (e.g., professional development credits.)
- 5) Establish a group of “trainers” in each building.
- 6) Provide open lab time for staff to share ideas and learn from peers.
- 7) Provide training for support staff, substitute teachers and paraprofessionals.
- 8) Target workshops during the school day at a particular teaching subject area.
- 9) Schedule “Follow-up” workshops where teachers can return to ask questions.
- 10) Develop a core set of technology skills.
- 11) Educate teachers on Michigan’s definition of Michigan Educational Technology Standards and Expectations (METS).
- 12) Provide real rewards which recognize the contribution of teachers.

Timeline For the Implementation of Various Types of Professional Development

Teachers will be given the opportunity to experience a core set of web sites. This process will include ample opportunities for teachers to understand how to fully integrate technology into their classrooms. The technology training model, offers training to staff in smaller, manageable sections, allowing them to take the time to navigate and become familiar with websites such as Learnport.nettreker. Staff needs the time to see relevance on the site to the benchmarks and how they can integrate this new knowledge into the classroom.

2006-2007: In district awareness of new websites, workshops in improving skills and continue integration of word processing, graphics, spread sheets, data bases and Power Point websites to meet METS, ISTE, RUBRICS. One Tuesday per month share integration successes. Identify further needs and establish best method to teach.

2008-2009: Intermediate workshops in all of the above while moving to basic workshops integration of the network. Internet, electronic mail, and the safety and use of portable/wireless labs.

2009-2010: Intermediate workshops in all the above while moving to basic workshops in the skills and integrations of building Web pages. Continue to identify monthly on Tuesday afternoons areas that staff desire further professional development.

2010-2011: Advanced workshops in all the above and respond flexibly to changes and new technology. Ask high school students to sit in on development in professional development to offer short cuts, sites, tips we are unaware of.

Evaluation:

Each professional development endeavor in technology will be evaluated by participant feedback. Monitoring and observing the implementation of newly learned skills will also be utilized.

Section 10. Supporting Resources

Supporting an effective professional development plan involves many components that research has found to be important. These components include the following: curriculum-specific applications, hand-on technology use, a variety of learning experiences, collegial learning, active participation of teachers, sufficient time, technical support, administrative support, adequate resources, built-in evaluation, continuous funding, administrative support, and a process to ensure that professional development in technology is ongoing. In addition to the above listed resources, print materials, such as policies and manuals, will be made available to all teachers and staff at a central location at each school. The school web site will also contain information on professional development. The District will continue to make use of RESA's site based Video Collection as well as the IMTS through the on-line catalog.

Section 11. Infrastructure Needs/Technical Specifications and Design

The district will remove the current phone system and replace with a Cisco VoIP solution. The new phone system will be in place by the 2009-2010 school year.

Looking Ahead

The district will continue to use the OPT-E-MAN data link between River Rouge School District and Wayne RESA. The current capacity of 25 MB per elementary stacks up to 100 Mb to accommodate growth in distance learning opportunities.

Computers five years or older. Sabbath School's computers, that were in the lab, will be replaced in the 2007-2008. All network printers will be replaced between 2007 and the end of 2009. Classrooms will have increased numbers of computers instead of a lab.

After year 2009, desktop workstations and any other laptops in the district will be replaced on a five-year cycle starting with the oldest computers. Printers will be refreshed after the seventh year, beginning with high usage areas. Network infrastructure components will be monitored and replaced on a five to seven year cycle.

The District's current configuration is a LAN Network with proposed upgrades to OPT-E-MAN Service. We are currently operating on a T1 backbone. The installation of OPT-E-MAN is covered under the USF and will cost between \$18,000 and \$26,000 at each elementary and \$1,500 at the high school. Installation will take place in 2006/2007. Our USF discount is 86 %. The demands of keeping up with technology to enhance the District's services to the community as well as to equip the student population to be 21st century citizens requires significant Investment of resources to provide the type of infrastructure to allow these services to function correctly.

Additionally to take full advantage of the cost savings as well as the technological enhancements of VoIP (Voice over IP), the Local Area Network infrastructure will continue to be upgraded.

The vision infrastructure upgrade consists of adding mobility to the students and staff at each school via wireless classrooms (WIRELESS LAN). Many school districts have already implemented a WIRELESS LAN and have seen increased productivity as a result.

The School District for the City of River Rouge deploys a Metropolitan Area Network (MAN) consisting of OPT-E-MAN Fiber connections from each of the Elementary and Middle School to the High School. Each OPT-E-MAN Fiber connection terminates at the High School for access to district servers and Internet connectivity. The district utilizes one (1) shared OPT-E-MAN Fiber connection for Internet and e-mail access to Wayne County RESA. The physical structure of the High School also serves as the District's central offices. Three schools have an existing Media Center. The district maintains computer laboratories in each of the three schools, totaling seven laboratories. The physical overview of the laboratories is four (4) Apple Macintosh laboratories and two PC laboratories with a minimum of one laser printer per lab. In the classrooms, students have access to a minimum of one (1) computer that is connected to the Local Area Network (LAN) for research and Internet access. The district utilizes

Apple Xserve servers running Mac OS 10.2 Server operating software. The district maintains two (2) scanners, four (4) multi-media editing machines, ten (10) DVD players, eight (8) laser disc players, three (4) digital data projectors, twenty-one (21) television/VCR/DVD combinations, one (1) multi-camera television studio with internal broadcasting and cable broadcasting capabilities, two hundred (200) G3/G4 Macintosh computers, seventy (70) PowerPC Macintosh computers, one hundred fifty (150) Windows PC computers, fifteen (15) digital cameras, and one hundred (100) Macintosh and Windows laptops. The district currently maintains a PBX telephone system with a voicemail server as well as plain old telephone service for each building as a backup.

In the next three years, the River Rouge School District plans on implementing upgrades and repairs to its existing data infrastructure as per funding for Wireless LAN from grants, donations, and universal service fund:

- LAN infrastructure,
- Internet access,
- Wireless network access,
- Access to higher education offerings,
- Electronic delivery of video, audio, and software resources,
- Voice over IP (VoIP) phone system.

The district employs one year round technology specialist who provides technical support to our schools. We also make use of Zook Technologies, a computer troubleshooting firm that assist in technical support. By 2010, the district would like to have one more full time technical specialist to assist in technical support.

Section 12: Increase Access

By the fall of 2006 each classroom teacher will understand and implement their designated curriculum striving for excellence in student achievement (METS and ISTE). Utilizing the rubrics they have begun to write for the METS and ISTE, they will carefully design their instruction to maximize the learning of their students. They will provide a seamless curriculum, ample opportunities, and excellent instruction for students in the use of technology to enhance their learning and their lives. Teachers started writing grade level rubrics to reach proficiency in the METS in early 2006.

The district recognizes with the increased use of Internet video, audio, and other online resources the LANs currently installed in the districts buildings will need upgrades from current shared hub technology to dedicated switch technology. The district recognizes a need to protect the students from inappropriate online material and plans to

implement a filter to prevent access to inappropriate content as well as a firewall to prevent unauthorized use and access to and from the district data network. The district recognizes the current voicemail server is aging and plans to implement a new voicemail server with the capabilities of being used in a VoIP system in the future. The first and primary focus is to create more access to technology in the classroom. The current needs are to increase the amount of computers in the classroom as well as increase the use of the Internet as an educational tool.

Walter White has chosen to go labless and instead increase the number of computers in the classroom. The High School opens its computer labs one hour before school starts each day. Both of these measure increase computer usage for all children in their schools. The hour early before high school allows the community to use the lab. The high school will have media lab open for all students to use during the day. Sabbath School will continue to remove five computers from the lab for classroom use. Ann Visger has sign up lab sheets for all classrooms to use the lab.

Section 13: Project Budget

<i>Item</i>	<i>District</i>	<i>USF or Grant</i>	<i>Total</i>
Year 1			
Technology Consultant, Career Prep & Technology Specialist	\$100,000.00		\$100,000.00
Infrastructure & Technology Video/voice/data Computers Printers Software Networking Opt-E-Man Pbx-Maintenance Centrex	\$33,692.00	\$201,471.00	\$235,163.00
Professional Development		\$5,000.00	\$5,000.00
Year 2			
Technology Consultant, Career Prep & Technology Specialist	\$100,000.00		\$100,000.00
Infrastructure & Technology Video/voice/data Computers-replacement Printers-replacement Software Opt-E-Man Pbx-Maintenance Networking	\$33,692.00	\$201,471.00	\$235,163.00
Professional Development Teacher Universe A+ Anywhere Learning System Advanced Technologies Consultants	\$5,000.00	\$5,000.00	\$5,000.00
Year 3			
Technology Consultant, Career Prep & Technology Specialist	\$150,000.00		\$150,000.00
Infrastructure & Technology	\$33,692.00	\$201,471.00	\$235,163.00

Video/voice/data Computers-replacement Printers-replacement Software Networking Pbx-Maintenance Opt-E-Man			
Professional Development Teacher Universe A+ Anywhere Learning System Advanced Technologies Consultants	\$5,000.00	\$5,000.00	\$5,000.00

Section 14:

The River Rouge School District will encourage the efficient use of funds and resources in a manner, which ensures that all schools and students have access to technologies that improve student competencies. Currently the Universal Service Fund, Title I and Perkins Grant money fund the technology used in the district and general fund.

Strategies:

1. Encourage school/business partnerships and matching fund programs.
2. Seek local corporate matching funds.
3. Chamber of Commerce orientations.
4. Local business partnerships.
5. Survey businesses to determine each one's willingness and possible methods of contributing funds and/or other technology support.
6. Develop a funding schedule for the technology infrastructure: maintenance, support upgrading, expansion and addition of new technologies.
7. Develop an annual inventory of technology equipment in the business department and individual classrooms.
8. Identify specific technologies that will need to be purchased.

Follow district standards for purchasing new equipment and the upgrading of current equipment.

Section 15: Evaluation.

The evaluation of the technology process will be conducted on a bimonthly basis by a number of techniques including portfolios of evidence, assessments, and surveys. The responsibility of such evaluations will be that of the School District's Superintendent in conjunction with the Technology Committee.

The responsibility of the Technology Committee will be to monitor the collection of evidence as well as conduct staff surveys yearly. Review "best strategies" portfolio from buildings/departments/grade levels successfully implementing and integrating technology. These best practices will then be used as recommendations for instructional methods and will be shared with all staff. Surveys conducted with focus on

available technology and resources incurring compatibility with District Systems and stated curriculum. Each building/department will conduct an exit survey at the end of each school year indicating both successes and deficiencies in technology integration. Unmet goals will be reevaluated and those considered valid will be carried to the next school year for further review, refinement, and progress.

One measure for future equipment needs will be the extent to which the needed equipment and software has been purchased and made available. Also measured will be the investigation of business partnerships and grants that have been utilized.

The plan to integrate technology into the curriculum will be combined with the evaluation of the success of the meeting the METS in each building. Since the goal is to integrate technology into the curriculum, the successful use of the evaluations should be the degree to which it assists staff in effectively teaching students to learn the competencies required in each grade and content area. The plan for ongoing professional development will be evaluated by surveying staff each year as to their self-assessed ability level and their perceived need for additional training. We will also assess the quality of professional development for staff by student performance and the quality of the work produced by students and staff. The level of technical support will be determined by tracking and surveying the frequency and quality of support received by the staff. The tools for these evaluations will include:

- Student performance on teacher made and standardized tests.
- Surveys of teachers and students as to their use of technology.
- The level of performance of students leaving each major level – elementary, middle and high school – will be assessed as to the use of technology, 8th grade students will take a 75 question quiz to test for proficiency for the METS.

An evaluation of the previous technology plan will be used to establish a baseline for the current amount and use of technology. Progress will be demonstrated by increased use and integration of technology from that baseline. The unmet goals will be addressed at the once monthly Tuesday. We will provide different professional development to make sure the goals are met.

Section 16: Acceptable Use Policy

Information resources offer access to computers and people throughout the world. Students and staff will have access to electronic mail and college and university libraries, information and news from a variety of sources and research institutions, software of all types, and discussion groups on a wide variety of topics, and much more!

The following guidelines are intended to be helpful and provide a base from which district and school policies can be tailored. While the emphasis here is on appropriate use, there is no intent to diminish the vital nature of electronic information services. The

concerns described here are real, but they should not discourage school officials from planning for the appropriate use of one of education's newest and most valuable tools.

We encourage the establishment of a district level electronic information resources committee. Whenever possible, the committee should be composed of school board members, administrators, teachers, library media personnel, students and parents. It should be chaired by the administrator who has overall responsibility for student use of electronic information resources. The committee should develop policies and provide all users and potential users and parents with a handbook that describes the policies related to the acceptable use of electronic information resources.

While electronic information resources offer tremendous opportunities of educational value, they also offer persons with illegal or unethical purposes avenues for reaching students, teachers, and others, including parents. The following represent some of the inappropriate uses that may occur:

- Using the network for commercial advertising
- Using copyrighted material in reports without permission
- Using the network to lobby for votes
- Using the network to access a file that contains pornographic pictures, taking them home, and telling parents, "I got them at school"
- Using the network to send/receive messages that are racist
- Using the network to sent/receive inflammatory messages
- Creating a computer virus and placing it on the network
- Using the network to send/receive a message with someone else's name on it
- Using the network to send/receive a message that is inconsistent with the school's code of conduct
- Using the network to send/receive messages that are sexist and contain obscenities
- Using the network for sending and receiving a large number of personal messages

The primary purposes of the committee are to devise ways to protect students, to develop processes for the reporting of abuses, and to design methods to prevent their recurrence.

All users should be aware that the inappropriate use of electronic information resources can be a violation of local, state, and federal laws. Violations can lead to prosecution.

I. User Contract

Electronic Information Resource Contract

The River Rouge School District strongly believes in the educational value of such electronic services and recognizes the potential of such to support our curriculum and student learning in our district. Our goal in providing this service is to promote

educational excellence by facilitating resource sharing, innovation, and communication. The River Rouge School District will make every effort to protect students and teachers from any misuses or abuses as a result of their experiences with an information service. All users must be continuously on guard to avoid inappropriate and illegal interaction with the information service.

Please read this document carefully. When signed by you and, if appropriate, your guardian/parent, it becomes a legally binding contract. We must have your initials when indicated and your signature and that of your guardian/parent (if you are under 18) before we can provide you with an access account.

Listed below are the provisions of this contract. If any user violates these provisions, access to the information service may be denied and you may be subject to disciplinary action.

II. Terms and Conditions of This Contract

1. **Personal Responsibility.** As a representative of this school, I will accept personal responsibility for reporting any misuse of the network to the system administrator. Misuse can come in many forms, but it is commonly viewed as any message(s) sent or received that indicate or suggest pornography, unethical or illegal solicitation, racism, sexism, inappropriate language, and other issues described below. All the rules of conduct described in the District publication entitled “ _____ ” apply when you are on the network.
2. **Acceptable Use.** The use of my assigned account must be in support of education and research and with the educational goals and objectives of the River Rouge School District (these may be found in the District document entitled “ _____ ”). I am personally responsible for this provision at all times when using the electronic information service.
 - a. Use of other organization’s networks or computing resources must comply with rules appropriate to that network.
 - b. Transmission of any material in violation of any United State of other state organizations is prohibited. This includes, but is not limited to: copyrighted material, threatening or obscene material, or material protected by trade secret.
 - c. Use of commercial activities by for-profit institutions is generally not acceptable.
 - d. Use of product advertisement or political lobbying is also prohibited.

I am aware that the inappropriate use of electronic information resources can be a violation of local, state and federal laws and that I can be prosecuted for violating those laws.

I have read and understand this provision.

Initial _____

- III. Privileges. The use of the information system is a privilege, not a right, and inappropriate use will result in a cancellation of those privileges. Each person who receives an account will participate in an orientation or training course with a _____ faculty member as to proper behavior and use of the network. The _____ system administrator (operating under the aegis of the school board and the district office) will decide what is appropriate use and their decision is final. The system administrator(s) may close an account any time deemed necessary. The administration, staff, or faculty of River Rouge School District may request that the system administrator deny, revoke, or suspend specific user accounts.

I have read and understand this provision.

Initial _____

- IV. **Network Etiquette and Privacy.** You are expected to abide by the generally accepted rules of network etiquette. These rules include (but are not limited to) the following:

- a. **BE POLITE.** Never send, or encourage others to send, abusive messages.
- b. **USE APPROPRIATE LANGUAGE.** Remember that you are a representative of our school and district on a non-private system. You may be alone with your computer, but what you say and do can be viewed globally! Never swear, use vulgarities, or any other inappropriate language. Illegal activities of any kind are strictly forbidden.
- c. **PRIVACY.** Do not reveal your home address or personal phone number or the addresses and phone numbers of students or colleagues.
- d. **ELECTRONIC MAIL.** Electronic mail (e-mail) is not guaranteed to be private. Messages relating to or in support of illegal activities must be reported to the authorities.
- e. **DISRUPTIONS.** Do not use the network in any way that would disrupt use of the network by others.
- f. **OTHER CONSIDERATIONS:**
 - Do be brief. Fewer people will bother to read a long message
 - Do minimize spelling errors and make sure your message is easy to understand and read
 - Do use accurate and descriptive titles for your articles. Tell people what it is about before they read it

- Do get the most appropriate audience for your message, not the widest
- Do remember that humor and satire is very often misinterpreted
- Do remember that if you post to multiple groups, specific all groups in a single message
- Do cite references for any facts you present
- Do forgive the spelling and grammar errors of others
- Do keep signatures brief
- Do remember that all network users are human beings. Don't "attack" correspondents; persuade them with facts
- Do post only to groups you know

I have read and understand this provision. Initial _____

V. **Services.** The River Rouge School District makes no warranties of any kind, whether expressed or implied, for the service it is providing. The River Rouge School District will not be responsible for any damages suffered while on this system. These damages include loss of data as a result of delays, non-deliveries, mis-deliveries, or service interruptions caused by the system or your errors or omissions. Use of any information obtained via the information system is at your own risk. River Rouge School District specifically disclaims any responsibility for the accuracy of information obtained through its services.

I have read and understand this provision. Initial _____

VI. **Security.** Security on any computer system is a high priority because there are so many users. If you identify a security problem notify the system administrator at once. Never demonstrate the problem to other users. Never use another individual's account without written permission from that person. All use of the system must be under your own account. Any user identified as a security risk will be denied access to the information system.

I have read and understand this provision. Initial _____

VII. **Vandalism.** Vandalism is defined as any malicious attempt to harm or destroy data of another user or any other agencies or networks that are connected to the system. This includes, but is not limited to, the uploading or creation of computer viruses. Any vandalism will result in the loss of computer services, disciplinary action, and legal referral.

I have read and understand this provision. Initial _____

APPENDIX A

The District has determined that USF funds could be used to fulfill much of what is herein described, the following list shows eligible services that contain the technologies described in this document:

911 and E911 trunks or lines are dedicated telecommunications links specifically or exclusively used for connection between a school/library and a Public Safety Answering Point (PSAP). 911 or E911 trunks or lines are eligible for discount. However, 911 and E911 monitoring services are information services and therefore are not eligible.

An alarm telephone line is a telecommunications line specifically dedicated to a school or library's burglar or fire alarm system. It may be the equivalent of a POTS line, or a dedicated line between the school or library and the alarm company. A telecommunications circuit used for alarm monitoring is eligible for discount. However, alarm-monitoring services are information services and therefore are not eligible.

The cost of Cellular service to eligible users is eligible for discount, but of telephones or associated maintenance on the equipment is not.

Services beyond those provided by a school or library's internal facilities provide telephone conference calls or video conferencing are eligible discount if the conference services are only used for eligible educational library purposes, or if an auditable monitoring system is established provides a way to allocate between eligible and ineligible uses.

Leased data circuits for voice, video, and/or data that connect an eligible school or library facility to other locations beyond the school or library, including an Internet Service Provider, are eligible for discount.

Distance Learning utilizes video and audio technologies to allow students who are remotely located from other students or the lecturer to participate interactively with the class. Transmission services that provide Distance Learning are eligible for discount. The school district will utilize distant.

A fax machine telephone line is a telecommunications line specifically dedicated to a school or library's fax machine. A fax machine line is eligible for discount.

A Homework Hotline Service is typically provided as a toll free telephone number for students to contact the school regarding questions on homework. Telecommunications services and voice mail services used to provide a Homework Hotline Service are eligible. However, charges for creation, configuration, or maintenance of content are not eligible.

An Inside Wire Maintenance Plan is a monthly recurring charge that provides for the repair, replacement and maintenance of customer owned inside premise wire. Cost of the service is sometimes included in regular monthly bills for local and long distance

telephone services, and is eligible if clearly ancillary to such telecommunications service.

Long Distance Telephone Service is provided by AT&T and provides telephone service outside of a local calling area. Long Distance Service and associated charges are eligible for discount.

Telephone service includes local phone service (sometimes known as "Plain Old Telephone Service" or POTS), Cellular/Personal Communications Service (PCS), and long distance telephone service, and involves individual wire or wireless lines provided by a telecommunications provider. Telephone service is eligible. AT&T provides our local phone service. Verizon provides our pager service. The school district does not utilize cellular service.

A trunk, or transport, is a communications path between two switching systems. Switching systems typically include equipment in a telephone company central office and a Private Branch Exchange (PBX). Central Office trunks connect a PBX to the switching system at the central office. Tie trunks connect two PBXs together. Altura lease costs to provide trunk services are eligible for funding.

The provision of a wide area network communication service, irrespective of technology, when provided on a common carrier basis, is an eligible Telecommunications Service. Technologies employed include but are not limited to T-1, Gigaman, and OPT-E-MAN, Frame Relay, ISDN, Satellite, and Wireless. Excluded from this definition are services that provide broadcast content or cable television, because these are not considered telecommunications services.

The same eligibility conditions apply for the lease of wireless WIRELESS LANs as for other WIRELESS LANs, except that, in the case of Wireless Wide Area Networks, the radio frequency components such as transmitter and antenna (or satellite dish) are considered to achieve the same functionality as cabling, and are therefore eligible. For further information, see the Special Eligibility Condition for Wireless Components.

"Internet access" provides access to the world-wide information resource of the Internet, and includes features typically provided for adequate functionality and performance, when included as a standard component of a vendor's Internet access service.

Such features could include Domain Name Service, to assist use of the standard Internet naming convention; Dynamic Host Configuration Protocol, to assist with providing devices with a unique address; and e-mail.

Internet access, regardless of technology platform, is eligible for discount. Such access may include transport of digital communication using any Internet-based protocols, including encapsulation of data, video, or voice so long as this is the most cost effective way to access the Internet. In addition, features that are not themselves eligible, such as caching and filtering, can be included if an integral component part of the service, and the inclusion of these features meets the limitations given in the Special Eligibility

Condition for Ancillary Use. See also the Special Eligibility Condition for Internet Access with Ineligible Features.

Domain Name Registration is the registering of the name and the charge associated with the registration process. Domain Name Registration is eligible for discount.

E-Mail Service, which provides for the transmission of simple text messages and other embedded data, is eligible for discount.

A firewall service may be funded as a part of Internet access because a firewall is necessary to ensure continued operation of the network.

GSP is short for Global Service Provider. The GSP provides connection between the ISP network and the global Internet network. There may be separate charges for this component of Internet access and such charges are eligible if the total price of Internet access, including this component, is the most cost-effective means for obtaining access. Web Hosting is an Internet service provided by an Internet Service Provider.

The ISP will host a school or library's website (www.schoolname.org) as part of the ISP bundled service offering, or as an optional service. Web Hosting services that provide a means for a school or library to display content on the Internet is eligible for discount. However, eligibility is limited to the hosting service only, and not the creation or modification of content, which is not eligible.

A wide area network is a voice, data, and/or video network that provides connections from within an eligible school or library to other locations beyond the school library. An integrated information service that provides Internet Access through a Wide Area Network may be eligible for funding as Internet access if that offering is the most cost effective means of accessing the Internet.

Charges for Internet access may include the cost of leasing on-premise WIRELESS LAN facilities if certain limited conditions are met. It is the vision of the district to keep step with technology by increasing WIRELESS LAN for our schools. Each year the funding rules change.

An Access Point is a base station in a wireless LAN. Access points are typically stand-alone devices that may plug into an Ethernet hub or server, or may provide a repeater function for wireless networks. Note that eligibility is based on Internal Connections, i.e., use in a LAN (not a WIRELESS LAN) environment.

An access point provides for wireless networks what cabling provides for wired networks. Therefore, access points are "an essential element in the transmission of information within the school or library." Note, however, that eligibility is based on Internal Connections, i.e., use in a LAN (not a WIRELESS LAN) environment. To advance with technology for 2006-2009 we will upgrade to OPT-E-MAN service at 25mb

at each elementary. The elementary schools feed into the high school, which will upgrade to 100mb in the 2006/2007 funding year.

An antenna is a device for transmitting and/or receiving radio frequency signals. Antennas provided as part of Wireless Local Area Networks (LANs) are eligible for discount if they are separately priced on a contract or are sold separately. Antennas embedded in ineligible equipment, such as computer workstations, and not separately priced on a contract, are not eligible.

The operation of a PBX or Centrex system requires the use of a switchboard or attendant console for the transfer of incoming calls to the appropriate extension when systems are not equipped with Direct Inward Dialing. The attendant console may include Direct Station Selection (DSS), which provides an easy means for transferring calls. One console, with or without Direct Station Selection, qualifies for discount with each eligible PBX or Centrex system. Our Centrex service is provided by SBC/AT&T. The purchase of a CSU/DSU is eligible as Internal Connections. Alternatively, a CSU/DSU may be leased as part of an eligible Telecommunications or Internet Access service.

A Client Access License is a software licensing approach used by some vendors, and provides authorization to access a software product. Client Access Licenses that provide access to eligible software are in turn eligible. For example, Client Access Licenses for a network operating system are eligible. Client Access Licenses for word processing or spreadsheet software are not eligible.

Servers are conditionally eligible for discount. File servers must serve as a conduit for information rather than as a source for content to be eligible. Dunn School's file server will be moved to Walter White before the close of the 2005/2006 school year. Dunn's file server was purchased through Bond funds. Due to a major virus issue, Walter White's file server (USF funds) was shut down in 2004 at the request of WCRESA because Dunn School is closed at this time.

A network operating system associated with an eligible file server is likewise eligible for discount, including functionality provided with the core network operating system at no cost.

Eligible servers may be used in the following capacities. DHCP Server Domain Name Server E-Mail Server Firewall Server Terminal Server Switches are eligible for discount. Switches will be upgraded in 2006 at each school. River Rouge High School will receive the upgrade switches.

The PC Attendant Console is an electronic PC (computer) based console used in support of, or in place of, a PBX system. The Console provides the capabilities and features of other attendant consoles, such as call transfers, answer button with queuing, emergency call priority, call waiting count, busy lamp field and many others.

One Console qualifies for discount with each PBX, or in place of a PBX system, whether PC Attendant or another type.

A PBX is a telephone switching system located at a business or organization's site. The PBX provides internal station-to-station dialing and access to the public switched network.

A PBX and the core PBX operating system are, in general, eligible for discount.

Routers are switching devices that can act as an interface between two networks, and connect different segments such as departments or floors in a building. Functionally, routers select the routing path for traffic, may provide features such as load balancing, and can provide trouble shooting diagnostic capabilities.

A router and the core router operating system are eligible for discount when used for an eligible purpose.

E-mail Software - A server-based, shared software product that provides email service is eligible.

Operational Software - Software required to obtain operation of eligible equipment, such as network operating system software, is eligible if required as a core component of an eligible Internal Connection.

Tape Backup units, including technologies such as QIC, DAT, 8mm, DLT, AIT, and ADR, are eligible when used as part of an eligible server. They are not eligible when part of a PC, or workstation.

The TX to FX Converter is a cable converter that converts copper connection to a fiber connection, and is eligible for discount.

An Uninterruptible Power Supply is a device that provides backup electric energy to a piece of equipment in the event of a power failure. A UPS is eligible if provided for use with an eligible component. In addition, a UPS Interface Expander, which allows a UPS to provide power management to multiple devices, is eligible if used for eligible equipment. A UPS system used as protection for both eligible and ineligible components must be cost allocated. See the Special Eligibility Condition for Cost Allocation. In addition, funding will not be provided for capacities that can provide continued electrical power for substantial periods in excess of that necessary for basic power protection.

The Voice Compression Module allows voice and fax traffic to share the same lines as data and LAN traffic.

The Voice Compression Module is an eligible component of Internal Connections when it is installed in an eligible component.

Voice interface cards (VIC) are usually components of a router or PBX system that interface with internal systems and the Public Switched Telephone Network, and are eligible for discount.

Otherwise eligible Internal Connections components may include technology for providing real-time or near real-time voice or video over IP (VOIP).

A wireless Local Area Network has the same eligibility as other Local Area Networks. Hubs, access points, antenna and other components that provide a wireless Local Area Network capability are eligible for discount. See the entries for "Local Area Network," "Antenna," and "Network Interface Card" in this section for additional information.

Voice mail services provided for one or more telephone lines are eligible for discount. Voice mail service need not be provided by an eligible telecommunications provider to be eligible.

APPENDIX B

Grades K-2

Content Areas

Language Arts

Technology

METS

1.a., 1.b., 2.c., 3.a., 3.b., 4.b.,

Reading-Language Arts Standards: Write to communicate a message for a variety of purposes. Show sound symbol relationship between letters of the alphabet and sounds in a word. Use a variety of age appropriate technologies for sharing information.

Software: *Orly's Draw A Story* (Broderbund)

Content Skills: Follow directions, write a complete sentence, use technology.

Literature: Big Green Monster

Introduction to the Lesson: In October we learn the letter M and we of course have fun with Halloween. The children have fun with the topic of monsters. We discuss nightmares and make a Monster Spray to "spray away" monsters that scare us. The children will practice using the program *Orly's Draw a Story* to draw and write. The computer will be connected to the TV. monitor to introduce the program to them.

Lesson Plan: The children are going to be using the computer to draw a picture of a monster. Before doing this they are going to practice drawing using the tools using *the Orly's Draw a Story* program. This lesson will be taught to small groups of about 5-8 children.

1. Show the children the Orly icon to double click on the desktop. Listen to Orly's introduction.
2. After the introduction click on the tire on the left that says **LEARN**. Listen to the directions Orly gives. Give the students a chance to take turns completing the different tasks in this learning tutorial.

3. Practice moving the mouse to move the pencil. Use the pencil to draw a face.
4. Click on the tools. Choose the paintbrush.
5. Click on the arrows so that the children can see all the different choices of colors. Click on a color and click on the nose to paint it.
6. Practice looking at patterns by clicking on the red button. Choose a pattern to color the face.
7. Click on the tools to choose the sponge. Show the children that the sponge only erases the color.
8. Click on the tools to choose the eraser. Show the children that the eraser erases the color and the pencil lines.
9. Practice clicking on the guy that has **UNDO** on his hat.
10. Show the students the shutters. Click on these and the red button to scroll through pictures you can choose.
11. Show the student the **MENU** sign. Click on this to go to the print screen.
12. Click on **PRINT** and the printer picture. Remind the students that they are to make sure their name is on their picture. Tell them they will now be able to work on their own to make a picture of a monster and write about their monster by following the activity card directions.

My Monster

Activity Card

1. Open *Orly's Draw A Story*
2. Click on Make Your Own Storybook
3. Click on **Picture**
4. Click on **Start A New Picture**

5. Click on the green shutters
6. Click on **Ideas**
7. Click on **Creatures and Plants**
8. Click on the red button to choose your monster
9. Use the paint tools to color your monster
10. Type a sentence about your monster, include your name on the page
11. Click on **Done**
12. Click on **Menu**
13. Click on **Print**
14. Click on a red button
15. Click **Print**
16. Click **Done**

My Monster

Assessment Rubric

3

The student drew or chose a monster.

The student completely colored their monster.

The student wrote a complete sentence about their monster.

The student printed their story page.

2

The student drew or chose a monster.

The student colored the monster.

The student wrote some words about their monster.

The student printed their story page.

1

The student drew or chose a character.

The student colored the picture.

The student wrote a word about their picture.

The student printed their story page.

Grades 3-5 Creating a Class Newsletter

Subject Area
Language Arts
Technology
Social studies
METS

1.b, 2.a, 2.c., 3.a., 3.b., 4.a., 4.a., 5.b.,

The students will use Microsoft Publisher or other publishing software and a digital camera to make a class newsletter that includes events that happened during the school year.

The students will begin research for their articles. The teacher will post examples of ideas on the board to help with the decision process. Once a topic has been found the student will brainstorm for ideas about what to write. A graphic organizer will be used.

The students will begin putting their ideas together to create a rough draft. The teacher will assign the students to teams. The students will share their rough drafts with their teams, getting ideas on how to improve or add to their ideas.

The students will decide which articles and photographs will go into their newsletter. They will re-write their articles and begin taking pictures to add to the article. When

taking the photos the students will keep in mind the space available for the photo. Photo editing software or paint programs can be used to crop the images to the correct shape.

The students will finalize their articles and add it to the Microsoft Publisher class newsletter. The students will use a rubric when writing their article.

The following websites will be available for the students to use when researching.

Publisher 200 tutorial

<http://www.microsoft.com/education/Publisher2000Tutorial.msp>

CNN Web Site

[Http://www.wtva.com](http://www.wtva.com)

FOX News

<http://www.foxnews.com>

News Herald (local newspaper)

<http://www.thenewsherald.com>

Grades 6-8

Scientific Method and Graphing

Subject Area

Science

Technology

Math

METS

1.a., 1.b., 3.a., 3.b., 4.b., 5.b., 6.a., 6.b.

Students will use the scientific method to determine how many seeds are in a watermelon. They will complete answers to the Lab report sheet. After completing the lab, students will use *Microsoft Excel* to create a graph of the combined results.

Students will use the steps of the Scientific Method to determine how many seeds are in a watermelon. After research the students will briefly view a sliced watermelon and estimate the number of seeds. After estimating, students will write a hypothesis. Students will then remove and count all the black seeds. Students will record the results on the lab report.

Students will determine if the amount of seeds is related to the type of watermelon.

Using Microsoft Excel students will create a bar graph of the results.

Attachments

Microsoft Excel Instructions

Lab Report

Checklist

Internet Resources

Consumer Testing in the classroom

<http://www.teachnet.com>

1. Click on START menu. Go to PROGRAMS > MICROSOFT EXCEL.
2. Enter numerical amounts (number of seeds per class) along ROW 1 until all class results have been entered. Each cell should only contain one number.
3. Highlight all numbers.
4. Go to INSERT > CHART.
5. Select the CHART TYPE > COLUMN.
6. Click on the type of column chart you wish to work with. The DEFAULT chart is the easiest.
7. Click NEXT.
8. Be sure that ROWS is selected so that the numbers highlighted earlier will be included in the graph.
9. Click NEXT.
10. Select the tab TITLES and enter a CHART TITLE for the graph and information for the X-AXIS and Y-AXIS. For example, the title could be Watermelon Lab. The X-AXIS could be labeled "Class by Period," and the Y-AXIS could be labeled "Number of Seeds."
11. Select tab LEGEND to remove legend from graph by removing the check from the SHOW LEGEND BOX. This is an optional step.
12. Click NEXT.

13. Place check in box titled AS OBJECT IN.
14. Click FINISH.

Scientific Method Lab – Watermelons

Purpose: To determine how many seeds are in a watermelon by using the six steps of the scientific method.

Step 1: State the Problem. (Tell what you want to find out.)

Step 2: *Research. Explain the difference between the following:*

(Use dictionaries, text books, etc.)

guess _____

estimate _____

Estimate how many seeds are in the watermelon. _____

Step 3: Form a hypothesis. (Remember, your hypothesis must be a possible solution to the problem stated above.)

Step 4: *Experiment.*

Step 5: Record Data. My piece of watermelon contained _____ seeds.

Step 6: Reach a Conclusion. There were _____ seeds in the watermelon.

**Was your hypothesis correct? _____

Final Results:

Group 1

Group2

Group 3

Group 4

Group 5



Checklist

_____ Group completed “Final Results” section of lab report

_____ Group correctly accessed Microsoft Excel

_____ Group included all necessary parts of the graph

_____ Group correctly identified parts of the Excel program (cell, rows, etc.)

_____ Group worked cooperatively to complete task

_____ Group followed instructions for shutting down computer



Checklist

_____ Group completed “Final Results” section of lab report

_____ Group correctly accessed Microsoft Excel

_____ Group included all necessary parts of the graph

_____ Group correctly identified parts of the Excel program (cell, rows, etc.)

_____ Group worked cooperatively to complete task

_____ Group followed instructions for shutting down computer

Grades 9-12

SimCity and PowerPoint

Subject Area

Social Studies
Technology
Science

METS

Students use the program SimCity to create a city. Afterwards, students use PowerPoint to create an election campaign to get themselves elected as mayor of their SimCity.

After being introduced to the program SimCity the students will take several class sessions to develop their own virtual cities. When all of the cities have been constructed, introduce the students to the basic components of PowerPoint. The focus will be on how to create a slide, how to format backgrounds, how to add clip art and animation, and how to incorporate sound effects and transitions. Students will have 7 slides in their presentation. The first slide will be built together with the teacher.

Students will consider the following questions in developing their campaign.

- What qualities do you have that would make you a good mayor?
- What have you done for your town in the past? (This will be made up of course)?
- What will you plan to do in the future?

Students will spend a class session on how to search for free clip art on the Internet and how to add clip art to the presentation. A digital camera could be used to include a picture of the student.

Useful Internet Resources

Simcity
<http://www.simcity.com>

Microsoft PowerPoint Tutorials
<http://www.microsoft.com>

Clip Art
<http://www.clipart.com>

SimMayor PowerPoint Project Grading Requirements:

7 Required Graphics _____ Y N Animations Y N
Background color Y N Sound FX Y N

Text or Word Art Y N 7 Slides _____ Y N
Effort

POOR EXCELLENT
Attractive Layout

POOR EXCELLENT
Spelling/Grammar

POOR EXCELLENT
Final Grade:
A B C D E

SimMayor PowerPoint Project Grading

Requirements:

7 Required Graphics _____ Y N Animations Y N

Background color Y N Sound FX Y N

Text or Word Art Y N 7 Slides _____ Y N

Effort

POOR EXCELLENT
Attractive Layout

POOR EXCELLENT
Spelling/Grammar

POOR EXCELLENT
Final Grade:
A B C D E

