

Jackson County Intermediate School District
Technology Plan
2006 – 2009



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SECTION 1

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Section 2

MISSION STATEMENT

Provide the best possible educational leadership and services within the framework of local, state, and federal law in an efficient, effective manner to assist local school districts in the implementation of programs for the development of each individual's fullest potential.

Introduction

Jackson County Intermediate School District (JCISD) is one of fifty-seven intermediate school districts in Michigan--established by legislative action in 1962 to assist local community school districts in the delivery of education to their communities based on local school district needs. The intent of that action was to establish regional districts which would share information between the [Michigan Department of Education](#) and [local districts](#).

JCISD is a regional school district which provides educational services to residents and local school districts within our assigned boundaries. These educational services include: training with staff and community members; training with students in [career and technical education](#), [special education](#), adult education, and through special programs such as [math and science](#), early childhood, [gifted and talented](#); assistance with technology/media plans and services; workforce development and [administrative and financial services](#).

JCISD works with twelve K-12 districts and three charter districts. The JCISD is the 15th largest by student population of Michigan's 57 intermediate school districts. The JCISD covers 658 square miles including all of Jackson County and small portions of Calhoun, Lenawee, Hillsdale and Ingham County.

The JCISD has a collaborative relationship with Jackson Community College, Spring Arbor University, several regional health and human service agencies, county government, and various business and industrial groups.

Section 3

VISION STATEMENT

The Jackson County Intermediate School District will facilitate and support collaborative educational services and systems for all students, embracing best practices and change.

ESSENTIAL ORGANIZATIONAL GOALS

TECHNOLOGY - The Jackson County Intermediate School District will provide leadership for educational programs and services.

RESOURCE EFFICIENCY - The Jackson County Intermediate School District will initiate and support the efficient use of technology services and resources.

CAPACITY BUILDING - The Jackson County Intermediate School District will seek to build capacity within the organization and the schools and community its serves.

QUALITY INSTRUCTION - The Jackson County Intermediate School District will provide and support the integration of technology into the quality teaching and learning in the schools we serve.

Technology Plan Purpose

This plan shall serve as the blueprint for providing technology and support services for the next three years (2003-04, 2004-05, 2005-06).

- Staff members who provide technology services shall look to this document as one source of setting direction for their services.
- Software and hardware noted in this plan shall be purchased with this document as a basis for discussing internal approvals. Purchasing guidelines for multiple or more costly items must be followed, however.
- Software and hardware purchase requests not noted in this plan shall require review by the Director of Technology to assure interoperability with existing equipment and networks.
- It is a work in progress. As such, it requires that each program and service review and evaluate the plan annually and make adjustments as needed.
- The plan looks at individual programs or service technology plans and combines them to provide a district-wide plan.
- The plan provides information to use for budget planning purposes.
- It is expected that staff will use the technology tools provided for them by the district.

Organization Vision, Mission, Goals

Plan

Technology Profile

I. Voice

A digital system currently supports 300 extensions. Connections between buildings on the Browns Lake Road campus are made via private copper cable, while connection to the buildings on the Parnall Road campus are supported by a public carrier T1.

The digital system provides each staff member with voice mail. Long distance is routed to a separate T1 line that is shared by the Distance Learning Room.

A call accounting system provides the district with summary and detailed calling information.

II. Video

JCISD operates three satellite receivers with C Band, Ku Band and MPEG reception. The Satellite receivers are connected to the internal cable TV system so programming can be viewed in any of the conference rooms at the Kratz Education Center (KEC). This includes a video messaging system in the hallways of the KEC and the Career Center.

III. Data

A county wide fiber optic network connects ten of the twelve local districts and the JCISD to the Internet. The JCISD network connects 800 workstations providing staff with print services and access to internal e-mail, the Internet and shared applications software. The workstations are connected within buildings with category 5 wiring and between buildings with fiber.

The network is operating via Microsoft Windows 2000, and provides staff access to Microsoft Office 2000, Exchange 2000, and MUNIS financial applications using an AIX server. Document Imaging is provided via a Microsoft 2000 system. The Substitute Employee Management System (SEMS) operates on a Windows NT server. The WEBMAX library booking system operates on a Linux server.

Participation in the MSU / SCNC modem pool enables all staff to have remote access to e-mail and the Internet. Dialup authentication and radius services are provided by a FreeBSD server supported by SCNC.

District Priorities

Funding

This technology plan will be funded through a combination of local property tax revenues, grants, Universal Service Fund, individual program and service budgeting, cooperative projects and opportunities provided by state and federal programs.

Acquisition/Implementation Summary

The technologies acquired, as a part of this plan shall:

- Ensure that technology systems reflect the JCISD's mission/vision, priorities and culture.
- Provide JCISD learners and workers with technological tools to access, manipulate, process and analyze information.
- Permit continued, improved and new quality services to both those we currently serve as well as those we may serve in the future.
- Set direction for professional growth and development related to technology use.
- Meet District technical standards for acquisition of hardware and software.
- Interface with local schools' and Michigan's technological direction and standards.
- Prepare JCISD to initiate and respond to collaborative activities.
- Place JCISD in a position to take advantage of funding opportunities.

The acquisitions identified on the following pages shall establish a direction, which permits JCISD learners and workers to utilize existing technology to the fullest capacity with enhancements (hardware, including additional workstations for those who need them, software, and human resources) that increase and improve our performance and expand our capabilities.

These technologies will help the District to:

- Maintain a ratio of one-to-one staff:computer ratio.
- Promote cost efficient operational processes.
- Establish effective work practices that may assist the District and our constituents (such as document imaging to maintain records).

With any plan that spans a number of years, it is important to note the following:

- Each department, program and work unit shall review and revise its plan annually based on changes in priority, need and budget.
- Costs associated with items identified will change (often reduced) as a result of new technologies.

Technology Planning Information

1. Replacing or Upgrading

May/may not increase inventory. Includes, for example:

- Desktop computers
- Laptop computers
- Printers
- Scanners / Digital cameras
- Fax machines
- Cell phones
- VCR / DVD players
- Televisions
- Data projectors

2. New Increase in inventory.

Includes, for example:

- Desktop computers
- Laptop computers
- Printers
- Scanners / Digital cameras
- Fax machines
- Cell phones
- VCR / DVD players
- Televisions
- Data projectors
- PDAs

3. New Initiatives

Includes, for example:

- Fiber optic network interconnectivity with collaborative partners
- Fiber optic network redundancy
- Library system interconnectivity with district library and partner ISDs
- County wide data warehouse
- IP telephony
- Local hosting streaming video server
- Special education database
- Electronic IEP processing
- Laser printed forms and online form processing
- Best practices professional development learning portal
- Online special services log capture and electronic Medicaid billing
- County wide contact database
- Fiber optic electronic upgrade to 10 GB

4. Infrastructure (District-wide and/or Building)

Includes, for example:

- Wiring
- Backup servers
- Routers/Switches/Hubs
- Network storage devices
- Firewall
- Content filter
- Spam filter
- Network monitoring / packet shaper

5. Professional Development

Includes, for example:

- Training
- Workshops
- Conferences

Cost Summary By Category

Categories	2003-2004	2004 –2005	2005 – 2006	3 Year Total
Replace or Upgrade	36,000	40,000	44,000	120,000
New	0	10,000	20,000	30,000
New Initiatives	60,000	60,000	60,000	180,000
Infrastructure	10,000	20,000	150,000	180,000
Professional Development	14,000	16,000	20,000	50,000
Totals	120,000	146,000	294,000	560,000

Cost Summary Of Additional Technical Support Items

Infrastructure and Network items not already included in individual programs' budgets in support of technology are included under the Information Systems program.

Categories	2003-2004	2004 –2005	2005 – 2006	3 Year Total
Salaries and Benefits	542,000	602,000	662,000	1,806,000
Maintenance and Service	18,000	22,000	25,000	65,000
Technical Support	20,000	30,000	40,000	90,000
Software Licenses	10,000	20,000	30,000	60,000
Supplies	5,000	6,000	7,000	18,000
Totals	595,000	680,000	764,000	2,039,000

Collaborations

State Level

Jackson County Intermediate School District staff makes the connections between the District and state organizations and initiatives.

- Library of Michigan
- Michigan Association for Media in Education (MAME)
- REMC Association of Michigan (REMCAM)
- Michigan Association for Computer Users in Learning (MACUL)
- Michigan Assistive Technology Resource (MATR)
- Michigan Virtual University/Michigan Virtual High School
- Michigan State University
- Michigan Technological University
- Link Michigan
- Michigan Braille Transcribing
- MiCTA
- Two-Way Interactive Communication for Education (TWICE)
- Center for Maritime and Underwater Resource Management

Regional Level

Whenever possible, Jackson County Intermediate School District shall plan with K-12 schools, higher education, public libraries, government entities and health care facilities to provide services to strategic and new markets and enhance collaboration among groups of people.

- The Southeast Central Network Consortium (SCNC)
- Capital Library Consortium
- Woodlands Library Consortium
- Substitute Employee Management System (SEMS)
- Assistive Technology – Region IV
- Telecommunications Association Of Michigan (TCOM)
- Jackson Community College
- Technical Advisory and Coordinating Council (TACC)
- REMC 15 Advisory Committee (REMC15AC)
- Madonna College
- Oakland University
- Spring Arbor University

Community Level

- Jackson Area Career Center Adult Education
- DisAbility Connections
- Jackson SAGE Society
- Jackson County GIS Project
- Ella Sharp Museum
- Jackson Space Center

Parental Communication and Involvement

JCISD has created a new web presence www.jcisd.org with a new user-friendly format to disseminate information to parents, staff, and the community at large. This web site includes links to specific JCISD student programs at the Jackson Area Career Center and Lyle Torrant Center for parental and public information awareness. The web site provides staff contact information and the ability to email administration and staff from the web page.

The web page also includes links to the web pages for all the local districts served by JCISD plus links to state agencies, community agencies, and other ISD / RESA agencies.

The JCISD Special Education division also works closely with the Parent Advisory Council, whose membership consists of parents of special needs children in the county. The council meets regularly with Special Education Staff to discuss curriculum and delivery of special education services.

The Jackson Area Career Center (JACC) also works with a number of Advisory Councils that help with planning for the 30 career and technical program areas supported at JACC. These councils include membership of parents and business leaders in Jackson County. JACC also benefits from an adult education planning committee.

JCISD also provides a student attendance tracking and truancy service for local districts. The attendance staff work closely with parents and community agencies to help monitor and improve student attendance.

Adult Literacy

JCISD collaborates with local districts that have established adult literacy education programs, such as Napoleon Community Schools and Jackson Public schools. JCISD facilitates referrals for persons contacting JCISD in search of these services.

New Technologies

JCISD operates a Distance Learning Center (DLC) which has the capability for point to point tele-conferencing and multi-point tele-conferencing with up to 15 remotes sites simultaneously. This is accomplished via membership in the Telecommunications Consortium Of Michigan (TCOM). TCOM owns and operates a video bridge located in Cass City. The consortium members connect via a network of high speed data lines to provide distance learning opportunities. Michigan Department of Education is a member of TCOM and uses the capability to provide regular training events for teachers and administrators.

The DLC is also used to provide students in the Jackson County the ability to take Virtual Field Trips to places that would be otherwise cost prohibitive to attend. Over the past two years students have visited places like Colonial Williamsburg, Columbus Zoo and Toledo Zoo. Several classes have also participated in Michigan Week activities by developing presentations for similar classes located in the Upper Peninsula and then present to each other using the DLC.

The DLC has also been used to provide professional development opportunities with our higher education partners at Eastern Michigan University and Oakland University.

JCISD has also introduced Digital Video Streaming to the local schools in Jackson County. A pilot program was funded by JCISD to provide the access for each high school. This technology provides access via Internet connection to Video Content servers so teachers could download full videos or video clips on demand to support curriculum. The content providers also provide teachers guides, outlines and student quizzes which relate to the video content.

Professional Development

Why Technology Professional Development?

To live, learn and work successfully in an increasingly complex and information-rich society, students and teachers must use technology effectively. Within a sound educational setting, technology can enable students to become:

- Capable information technology users
- Information seekers, analyzers, and evaluators
- Problem solvers and decision makers.
- Creative and effective users of productivity tools
- Communicators, collaborators, publishers, and producers
- Informed, responsible and contributing citizens

Through the ongoing use of technology in the schooling process, students are empowered to achieve important technology capabilities. The key individual in helping students develop those capabilities is the classroom teacher. The teacher is responsible for establishing the classroom environment and preparing the learning opportunities that facilitate students' use of technology to learn, communicate, and develop knowledge products. Consequently, it is critical that all classroom teachers are prepared to provide their students with these opportunities. Both professional development programs for teachers currently in the classrooms and preparation programs for future teachers must provide technology-rich experiences throughout all aspects of the training programs. Standards within this document provide guidelines for all teachers but specifically for planning teacher education programs that will prepare teachers to play an essential role in producing technology –capable students.

Today's classroom teachers must be prepared to provide technology-supported learning opportunities for their students. Being prepared to use technology and knowing how that technology can support student learning must become integral skills in every teacher's professional repertoire.

Teachers must be prepared to empower students with the advantages technology can bring. Schools and classrooms, both real and virtual, must have teachers who are equipped with technology resources and skills and who can effectively teach the necessary subject matter content while incorporating technology concepts and skills. Real-world connections, primary source material, and sophisticated data-gathering and analysis tools are only a few of the resources that enable teachers to provide opportunities for conceptual understanding.

The ISTE National Educational Technology Standards for Teachers (NETS) define the fundamental concepts, knowledge, skills and attitudes for applying technology in educational settings. (Appendix C). Performance indicators for each standard provide specific outcomes to be measured when developing a set of assessment tools. The six standards areas with performance indicators are designed to be general enough to be customized and yet specific enough to define the scope of the topic. The standards and performance indicators provide guidelines for teachers in the classroom.

How Technology Professional Development?

Substantive research of Educator Professional Development has been recorded in the *CEO Forum School Technology and Readiness Report*. More recent studies conducted by Yong Zhao, Professor of Education, Michigan State University, 2002, support the finding in the CEO Report. According to Dr. Yong Zhao, successful Technology Professional Development programs have the following indicators:

1. Context: The professional development should provide teachers with **adequate resources and time** to experience and experiment with district-supported technologies.
 - a. Ample and convenient access to technical and curricula resources
 - b. Technical support available and accessible beyond formal PD session
 - c. Ample time scheduled as part of PD for teachers to experiment with technology
2. Content: The professional development should focus on using technology to **improve students learning**. It should provide teachers with solutions to specific problems they encounter in their professional life.
 - a. Specific and deep connections to what teachers teach
 - b. Clearly demonstrate how technology can be used to improve how teachers teach
 - c. Clearly demonstrated how technology can be used to improve how teachers plan their teaching
 - d. Clearly demonstrated how technology can be used to improve classroom management
 - e. Clearly demonstrated how technology can be used to improve teacher professional productivity
3. Process Content: The professional development should aim at **building learning communities** among teachers and establish social connections among teachers and the support staff so that they can offer help and support to each other.
 - a. Provide ample opportunities for informal interactions around technology issues among teachers, technical staff, and administrators
 - b. Provide ample opportunities for and encouraging collaboration around technology issues among teachers, technical staff and administrators
 - c. Purposefully identifies and develops experts among teachers
4. Process: The professional development program should be **continuous, frequent**, and conducted in settings that are similar to the teaching contexts of the teachers.
 - a. A series of session that continue over a period of time (not under a semester)
 - b. Very frequent sessions, more than once a month
 - c. On-site, use technologies that are available to teachers
5. Provider: The professional development should be provided by **educational experts** who understand technology or technology experts who understand education.
 - a. Excellent command of technology
 - b. Excellent command of curricula content involved
 - c. Excellent instructional experiences or knowledge of pedagogy
 - d. Excellent knowledge of district/school policies and procedures related to technology

Meeting individual Teacher Needs: The Teacher Technology Adoption Process

The *CEO Forum School Technology and Readiness Report* describes five stages of Technology Adoption that underscores the idea that **understanding and using technology well takes time**. It also outlines very distinct stages that suggest the need for tailored activities for professional development. Tailoring professional development opportunities can help schools ensure that technology is considered a valuable tool for creativity, collaboration and innovation.

Stage 1: Entry

Students learning to use technology. Teachers are not using technology at this stage, but their students may be through directives from another teacher, or an educational software game that students can use independently.

Stage 2: Adoption

Teachers use technology to support traditional instruction and for their own use. Teachers use technology in a limited way, to do things they already would have done without the technology. They experience an advantage doing traditional tasks with a new tool and begin to see the power of the tool for other applications. For example, a teacher who uses word processing software to prepare a newsletter to parents discovers how much easier it is than using a typewriter.

Stage 3 Adaptation:

Teachers begin to use technology in ways that are connected to the curriculum, and in ways that are already familiar. For example, a teacher who has located web sites with reference material relevant to a particular lesson is using that material to present the subject matter to the class.

Stage 4: Appropriation:

Teachers view technology as a relevant tool for teaching and learning and they design learning experiences and environments to take advantage of its capabilities to meet objectives and desired outcomes.

Stage 5: Invention:

Discover new uses for technology. Teachers redefine classroom environments and create learning experiences that truly use the power of technology to involve students in task that require higher-order thinking skills as well as mastering basic concepts and skills.

Jackson County ISD Technology Professional Development Plan

Using the indicators from Yong Zhao's study and the stages of technology development from CEO study, the following Staff Development Model has been designed with mix and match delivery systems that would work with any Jackson County Schools to enrich their Technology Professional Development.

Our staff development program is centered upon five key behaviors .

- **Technical Repertoire:** Mastery of a variety of skills and practices that increase instructional certainty.
- **Reflective Practice:** Careful consideration that results in enhancement of clarity, meaning, and coherence in practice.
- **Research:** Exploration and investigation to discover ways to improve practice.
- **Collaboration:** Focused interchange with fellow staff to give and receive ideas and assistance.
- **Life Long Learning:** Develop strategies and skills to enthusiastically embrace learning technology.

Staff Development Model

The goal of professional development is to provide learning opportunities for all staff to learn how to use technology to improve their productivity and effectiveness of their job responsibilities, and how that applies to the overall goal of the school districts to educate students. We recognize that each district's staff members have a unique learning style and unique function within their school. Therefore, Jackson County ISD will follow a multi-dimensional model in order to implement our technology plan. This model includes various methods of delivery as well as multiple resources to facilitate ongoing training and support. Schools can choose to receive help from the ISD in these several areas.

1. **Assessment:** ISD will provide assessment surveys that provide information on technology skill levels of staff, as well as indicate areas that need more skill building instruction. ISD will also provide post training re-assessment in order to measure achievement.
2. **Technology Learning Teams:** ISD will help schools to form technology learning teams and coordinate Professional Development activities for these teams. The ISD will help each team determine a *Team Learning Plan* and an *Individual Learning Plan* where individual needs of the learners will be addressed by a variety of delivery systems. These Learning Teams will address teachers in the early stages of learning about technology. Learning Teams who become proficient can become Technology Leadership Teams and mentor other teachers as they learn about technology.

Delivery systems for the teachers include:

- a. **Series of Formal Classes.** Three courses have been developed to assist teachers as they move through the stages of learning technology. These classes are structured to meet during the school year on a frequent basis (for example 2 hours a week for 18 weeks) to help teachers better absorb the skills needed to meet the ISTE standards. When possible, these classes meet during the school day or after school to accommodate all area schools. They are also scheduled during the summer months to allow teachers more time to focus on technology without the regular classroom distractions. Professional Development credit is available with these classes, as is graduate credit through Spring Arbor University. These classes can be repeated for credit as well.
 - i. **Introduction to Technology.** This class introduces basic and intermediate skills needed to use many common software applications found in schools (Microsoft Word, Excel, PowerPoint, Kidspiration, Inspiration) as well as skills needed to use the Internet. This course is designed for teachers in the first stages of learning technology (Entry and Adoption).
 - ii. **Enhancing Units with Technology.** Teachers will learn how to create units that use technology. This course is designed for teachers who have basic technology skills and want to apply those skills in their classroom and to their unit planning. This course is for teachers in the advanced beginning or early middle stages of learning technology.

- iii. **Technology Leadership.** This class is for teachers wanting to become members of the Technology Leadership Learning Team (see below). Teachers will learn strategies in understanding and presenting to adult learners and can provide lessons and mentoring support for other teachers learning about technology.
 - b. **Informal Courses or Coaching:** Jackson County ISD Staff can address the districts' Technology Professional Development needs in the form of short informal instruction. Staff is on hand to meet with teachers to teach any of the skills or integration strategies needed. These sessions can be during or after the school day and can include one learning team, or the entire district population. Sessions can be designed with the help of the school liaison to meet technology professional development needs. The classes can be held in a district's building, or at the ISD.
- 3. **Technology Leadership Learning Teams:** ISD will continue to support the Technology Learning teams so they can become Leadership Teams. The ISD will coordinate sessions for the Leadership Teams so they will learn strategies in understanding and presenting to adult learners and can provide lessons and mentoring support for other teachers learning about technology. New technologies will also be introduced to Leadership Teams so they can stay current with Technology. These sessions are for teachers in the middle and later stages of learning technology and can be also be taken for graduate credit through Spring Arbor University.
- 4. **Classroom Support:** As time and staffing allows, the ISD will support teachers as they introduce technology lessons into their classroom. ISD can provide training directly to students, or be there in a supportive way to help teachers as they teach the lesson using technology. Teachers should be a member of a Technology Learning Team or a teaching being guided by a member of the Technology Leadership Learning Team.
- 5. **On-Line Support:** The ISD will create a web site to support Jackson districts in finding Best Practices. This Technology Integration Portal will provide a lesson plan repository where teachers share quality integrated learning opportunities. Unit Plans and lesson plans develop by Jackson teachers will be published to help others. Also tutorials and resources for teachers to use will be easily accessible.
- 6. **Student Intern Initiative:** The ISD will help coordinate districts that wish to develop and maintain students technology assistants within their schools . The ISD will provide resources for student instruction, teacher (mentor) instruction and setting up a system that benefits the school, technology director, students and teachers.
- 7. **Innovative Technology/Resource Support:** The ISD will research and provide area schools with information and hands on practice with new and upcoming technologies. The ISD will also acquire innovative resources to ensure successful and effective uses of technology.
- 8. **Feedback, Evaluation and Re-engineering:** The ISD will review the elements of this Technology Professional Development Plan as feedback is gathered and teachers, staff and the program evaluated and re-engineer the program to adjust to the needs of the District as well as funding and staffing issues that may need adjusting.

What the ISD Technology Professional Development plan may look like:

JCISD will provide an intensive and comprehensive training package for classroom teachers in technology integration. This program will be able to introduce teachers to technology, help them develop curriculum integration using technology, provide support to teachers as they use technology in the classroom, and create a technology leadership team that will continue the on-going staff development in technology and technology integration support.

Phase 1

- 1) Assess teachers from an area school to determine ability and interest levels in Technology.
- 2) Form a technology learning team(s) of five or less teachers who'd like to learn more about technology and use it in their classrooms.
- 3) Develop individual and team learning plans that will address basic skills needed, and curriculum integration training. Learning plans will be pulled from the Introduction to Technology and Enhancing Units with Technology course plans (with options for graduate credit)
- 4) Provide weekly technology sessions from 20 minutes to 2 hours for hands-on technology lessons. Two semesters in a row would provide the basic skills and the unit integration component (both available for SAU credits if 36 hours completed).
- 5) Provide support in the classroom for Learning Team teachers who wish to try technology lessons in the classroom.
- 6) Assess Technology Learning Team teachers at the end of the semester to determine what skills have been learning and what integration techniques have been used.

Phase 2

- 7) From technology learning teams, develop volunteer members for a Technology Leadership Teams to carry on the training in their home schools.
- 8) Assess Technology Leadership members in technology and technology related skills and also in the area of Adult learners. Create a meeting plan and learning plan for them to support teachers in their schools and also to continue to learn and be leaders in technology integration.

Phase 3

9) Teachers familiar with technology use the ISD web portal to access lesson plans and tutorials, as well as deposit their own there, and also mentor students as they become Student Technology Assistants.

Professional development activities for JCISD and local school staff and teachers are based on:

- District identified mission, vision and priorities
- Technology competencies needed to succeed on the job
- Needs related to new technologies and software
- Competencies students are expected to achieve

In addition, legislative mandates and district professional development plans are taken into consideration when planning professional development related to technology. Whenever possible, the technology is placed within the context of the curriculum or work environment when designing professional development activities.

For future hires, it is recommended that candidates demonstrate or speak to their skills, abilities and knowledge with word processing, electronic mail (Internet/intranet), voice mail/voice systems, a Windows based operating system and their willingness to utilize these skills as appropriate for the job. Where appropriate, candidates may be required to demonstrate those skills.

We recommend that supervisors of staff hired without the needed technology skills arrange for that training to take place within the first 90 days of employment.

Technology competencies that appear on the following page shall be used as a guide for staff and students to assess their own abilities. Staff can learn by working with colleagues in a “just in time” situation, attending conferences, viewing lessons on videotape available through Media Services, using a tutorial on CD-ROM, reading print resources, enrolling in on-line courses, or attending classes or workshops.

Needs of both Jackson County Intermediate staff and local schools’ staff will be identified by technology plans, individual requests and by survey.

Technology Competencies

It is recommended that the staff of the Jackson County Intermediate School District adopt the list below as standards of foundational technology skills and concepts to be achieved as related to job responsibilities.

- Evaluate and use computers and other related technologies to support the instructional process as described in the ISTE National Educational Technology Standards (NETS) found in Appendix C
- Demonstrate knowledge of access to resources for staying current in applications of computing and related technologies
- Operate a computer system in order to use it successfully
- Demonstrate knowledge of uses of computers for problem solving, data collection, information management, communications, presentations, and decision making
- Demonstrate skill in using and the commitment to use productivity tools for professional and personal use (for example, word processing, electronic mail, copy machines, appointment calendar, database, spreadsheet, print/graphic utilities, and voice mail)
- Exhibit knowledge of equity, ethical, legal and human issues of computing and technology
- Use computer-based technologies to access information to enhance professional productivity
- Apply computers and related technologies to facilitate emerging roles of the worker, the learner and the educator

District Resources

Staff and Services Provided to Support This Plan

Jackson County Intermediate School District provides staff and services to support this plan for ongoing technical support, training and assistance that is available to schools, teachers, and administrators served by the District. Private technology firms are also hired to provide technology training to District staff.

The Information Systems, Media Services, and REMC 15 departments provide technology support and training to district staff. Building technology coordinators and/or designated teachers assist teaching staff within buildings.

Schedules of technology courses are sent out to District staff. Courses are offered throughout the school year and summer. With planning and leadership from the Coordinator of Technical Instruction, these classes may be taught by ISD staff, contract individuals or qualified training organizations (such as New Horizons).

Staff participate in various conferences and seminars to update their skills and knowledge in various technology areas such as equipment enhancements, software revisions, business and industry partnership opportunities, and technology certification programs available to staff and students.

Software and printed materials are available for classroom and training purposes for all staff. Software upgrades are completed frequently. Upgrades include but are not limited to, operating systems, program specific applications, office applications, network, and instructional software. Manuals are available for all software and hardware. Manuals for software are incorporated into the "Help" function of the application software when appropriate.

A help desk support service is provided through Information Technology. Staff has access to the Internet and can seek computer support from various free on-line support services as well as the District's own Web site. Technical support staff and technology curriculum support staff are available in the District.

Maintenance, Repair and Replacement

Repair and maintenance for computing systems at JCISD is facilitated by the Information Technology staff. Minor repairs for computers and printers may be performed by Information Technology staff. Other repairs are performed through outsourcing with the appropriate vendors. Maintenance contracts are in place for network servers and routers, Internet servers, the RS/6000 and other network critical software and hardware. In general, laptops and desktops are not placed on maintenance contracts after warranties expire. Information Technology staff perform routine maintenance (including upgrades) of software and hardware for computing systems.

Information Technology staff maintain and enhance their skill levels by participation in training classes and seminars, college courses, and on-the-job training on an ongoing basis. They also read industry periodicals and learn from talking with vendor technology support staff via phone, email and Internet web site help/support areas. Networking with technology support staff from other schools and businesses is another method Information Technology staff use to stay current in today's fast paced technology environment.

The Information Technology Help Desk System is used as the communication channel for staff who need software/ hardware assistance, installation and support to request and receive technology support services.

Normal replacement of computer systems shall occur within a three to five year time span as required by software upgrades, infrastructure upgrades, or wear and use of the systems. The district bidding process is used to purchase equipment meeting district standards.

Curriculum Integration

On June 14, 2005, the Michigan State Board of Education officially adopted the K-2, 3-5 and 6-8 grade *Educational technology Standards and Expectations* (http://www.michigan.gov/mde/0,1607,7140-28753_33232_37328---,00.html), commonly referred to as METS. These standards were developed from the NETS. The 9-12 grades standards are currently under review. Performance indicators for each standard provide specific with performance indicators are designed to be general enough to be customized and yet specific enough to define the scope of the topic. The standards and performance indicators provide guidelines for teachers in the classroom.

General Education

All districts and classrooms throughout the JCISD service area utilize technical tools to enhance the teaching and learning of students, teachers, support personnel and administrators. Local districts collect, analyze and interpret data for decision-making purposes including programming, services and direct instruction at the district, building and individual student level. Classroom textbook adoptions include software programs that extend the learning of students through the use of student study guides, online aligned content expectations programs and assessments to improve student achievement. These technical tools provide immediate feedback to teachers and students, which increases student motivation and engagement in learning. In addition districts and buildings are required to report data for state (CDPI) and federal (NCLB) compliances using technical reporting mechanisms.

Jackson Area Career Center

All career center programs teach the occupationally specific software as required by the jobs and careers that students are placed in. Each program designs curriculum with employer input and the use of an industry based advisory council. Without fail advisory board members concur and validate that in order to reach the State of Michigan Standards and Benchmarks for High School Students, technology must be integrated into each program.

Curriculum at Jackson Area Career Center is integrated and includes employability skills, work habits, language arts, science and math as is appropriate to the occupations the students are in. Additional software programs assist with curriculum integration and provide individual remediation and teaching to assist with student learning.

Some programs do not have a computer friendly environment (fumes and dust present) in the classroom. Therefore there is a need for a centralized computer lab and staff where software applications can be taught. This also allows the center to provide highly individualized instruction to students from Jackson County and Hillsdale County school districts and private school academies that may attend on different schedules throughout the year.

In order to align career center curriculum with community colleges and provide for articulation, current technology must be provided for instructors to teach on-line into a report format that incorporates powerpoint and /or digital media presentations.

Curriculum Integration

Special Education

The Special Education Division of the Intermediate School District provides direct service and/or support service to children with disabilities, ages 0-25, their parents and teachers in each of the local districts and non-public schools in Jackson County. Every effort is made to ensure early identification and assistance to attempt to lessen the impact of the child's disability on his/her school performance. A broad continuum of instructional and support services are available to those children found eligible for special education as determined by the members of the Individual Educational Planning Team. Students eligible for special education services demonstrate impairments which range from mild to severe. The impairment areas include, mental, physical and/or health, hearing and vision, speech, emotional and learning. Educational programming, based on the least restrictive environment principle, is provided with appropriate goals designed to assist children in developing to their maximum potential.

It is the goal of Special Education to have students achieve the goals of their IEP. Technology often affords students the ability to access the curriculum. Individual student goals are written to reflect a local district's academic standards, and provide a student access to the full continuum of the curriculum.

Much of the technology used by the Special Education support staff is used across the local school districts we service. It is used to enhance the learning for Special Education students within those districts through the students' IEP's. IEP's are written to allow students to progress through the general education curriculum within their LEA. Technology allows students to view, hear, and explore the curriculum in different manners.

The Assistive Technology department maintains a loan library of hardware and software tools for Jackson County teachers. The Assistive Technology staff works with teachers to identify appropriate technology tools based on each student's IEP. The tools are loaned to the teacher and progress is evaluated by the Assistive Technology staff member. If the tool appears to be effective, then the Assistive Technology staff member works with the local school administration to purchase the tool. In some cases, grants are available to help acquire these tools.

Any student with a disability or at risk may benefit from the use of assistive technology. Some areas that assistive technology can support students in are reading, writing, math, organization, positioning, vision, hearing and communication.

Assistive technology has the potential of positively impacting students by providing tools and services that increase access to the curriculum, improve employment and learning options, ensure independent functioning and enable full participation in community living.

The Lyle Tarrant Center

The Lyle Tarrant Center, is operated by the Jackson County Intermediate School District and has been in operation since 1973, serving youth with development disabilities from all twelve school districts in Jackson county. At the Lyle Tarrant Center technology allows teachers to work with the Special Education student in nonstandard ways. Technology is used to enhance the learning and provide students with specialized software applications specifically designed to meet the unique needs of the learner.

Annual Evaluation Plan

As all effective plans are “living” documents, the expectation is that the plan will change so that it adjusts to the needs of the District. The Director of Technology will form an ad hoc Technology Plan Evaluation Group annually in the spring to evaluate the plan. This process will begin by asking each program/service area to report on its program/service area plan. Focusing on:

- Goals achieved
- Goals that need revision
- Review of resources requested
- Goals that need to be dropped
- Additional goals
- Comments on progress

The process used will be similar to the process outlined in Appendix A, but will be to review the ending year and update the remaining year(s).

Success will be measured by how well program/services area goals were met.

The District Technology Plan Evaluation Group will evaluate each program/service area review, and compile that information into an overall district report. An addendum will be added to the plan to accommodate any major changes agreed upon by the Technology Plan Evaluation Group.

Once the review and report are complete the report will be shared with the District’s Board of Education, published on the district's Web site, and be referred to in the district’s annual report.

Technology Plan

Appendices

Appendix A - Planning Process

GOAL: To create a strategic, long range technology plan that:

- Reflects JCISD's mission, vision, priorities, and culture
- Provides JCISD learners and workers with technological tools to access, manipulate, process and analyze information
- Permits continued, improved and new quality services to both those we currently serve as well as those we may serve in the future
- Interfaces with Michigan's technological direction and standards
- Prepares JCISD to initiate and respond to collaborative activities
- Places JCISD in a position to take advantage of funding opportunities

Who will work on this plan?

1) Developers

- The Director of Technology and ad hoc members from across the district who are listed on the acknowledgement page.
- Staff working on this task need to have supervisor approval, be able to look at the district as a whole versus a program view, be willing to assist individual workgroups and programs work with their plans and input, and be willing to learn.
- Tasks include:
 - Determining the elements to include in plan
 - Developing a process for getting input and feedback
 - Aligning the tech plan to JCISD School Improvement plan, JCISD PD plan, Michigan Technology Plan, JCISD mission, vision, priorities
 - Assisting JCISD work units and programs with developing their own plans
 - Communicating district-planning activity to all staff
 - Providing responses to district concerns and questions about the plan

2) Input Providers

All staff will have an opportunity to contribute to their plan through one person who will serve as a key communicator or representative of their group. The input will include needing to align building School Improvement Plans (if applicable), budget building/financial planning, and an acquisition plan.

Jackson County Intermediate School District will begin the planning process for this technology plan by starting with an evaluation of the last technology plan.

3) **Feedback Providers**

This group will not meet, but will have a set of guided questions to use as the draft plan is reviewed. Feedback will be provided by:

- Some individuals from JCISD staff
- A sampling of local school technology contacts or other designated local school staff
- Feedback from state level organizations, higher education, business or industry staff

4) **Writer**

The Director of Technology will write the plan based on input received from staff.

What's the timeline?

- Work on the plan began in July 2002.
- Written plan will be completed by May 2003.
- The plan will be taken to the Board of Education by June 10, 2003.
- The plan will be sent to Michigan Department of Education by June 16, 2003.
- The plan must be approved by Michigan Department of Education by June 30, 2003.

Appendix B – Standards

New Technical Standards workstations purchased that are to be a part of the District wide area network shall meet the minimum standards set by the REMC annual computer bid process.

Because workstation configurations change at a rapid pace, it is recommended that the District review and update the minimum standards on an annual basis.

Whenever possible, digital standards will be met when purchasing voice and video equipment.

Ergonomic Standards

It is the desire of the District to provide a safe, comfortable work environment. That includes the use of technology. As standards are developed, they shall be included in this plan. As new furniture is purchased we will design workstations that meet individual ergonomic needs.

Appendix C

ISTE National Educational Technology Standards (NETS) And Performance Indicators

Educational Technology Foundations For All Teachers*

I. TECHNOLOGY OPERATIONS AND CONCEPTS.

Teachers demonstrate a sound understanding of technology operations and concepts.
Teachers:

- a. demonstrate introductory knowledge, skills, and understanding of concepts related to technology (as described in the ISTE National Education Technology Standards for Students).
- b. demonstrate continual growth in technology knowledge and skills to stay abreast of current and emerging technologies.

II. PLANNING AND DESIGNING LEARNING ENVIRONMENTS AND EXPERIENCES.

- a. Teachers plan and design effective learning environments and experiences supported by technology. Teachers:
- b. design developmentally appropriate learning opportunities that apply technology-enhanced instructional strategies to support the diverse needs of learners.
- c. apply current research on teaching and learning with technology when planning learning environments and experiences.
- d. identify and locate technology resources and evaluate them for accuracy and suitability.
- e. plan for the management of technology resources within the context of learning activities.
- f. plan strategies to manage student learning in a technology-enhanced environment.

III. TEACHING, LEARNING, AND THE CURRICULUM.

Teachers implement curriculum plans, that include methods and strategies for applying technology to maximize student learning. Teachers:

- a. facilitate technology-enhanced experiences that address content standards and student
- b. technology standards.
- c. use technology to support learner-centered strategies that address the diverse needs of
- d. students.
- e. apply technology to develop students' higher order skills and creativity.
- f. manage student learning activities in a technology-enhanced environment.

IV. ASSESSMENT AND EVALUATION.

Teachers apply technology to facilitate a variety of effective assessment and evaluation strategies. Teachers:

- a. apply technology in assessing student learning of subject matter using a variety of
- b. assessment techniques.

- c. use technology resources to collect and analyze data, interpret results, and communicate findings to improve instructional practice and maximize student learning.
- d. apply multiple methods of evaluation to determine students' appropriate use of
- e. technology resources for learning, communication, and productivity.

V. PRODUCTIVITY AND PROFESSIONAL PRACTICE.

Teachers use technology to enhance their productivity and professional practice.

Teachers:

- a. use technology resources to engage in ongoing professional development and lifelong learning.
- b. continually evaluate and reflect on professional practice to make informed decisions regarding the use of technology in support of student learning.
- c. apply technology to increase productivity.
- d. use technology to communicate and collaborate with peers, parents, and the larger community in order to nurture student learning.

VI. SOCIAL, ETHICAL, LEGAL, AND HUMAN ISSUES.

Teachers understand the social, ethical, legal, and human issues surrounding the use of technology in PK-12 schools and apply those principles in practice.

Teachers:

- a. model and teach legal and ethical practice related to technology use.
- b. apply technology resources to enable and empower learners with diverse backgrounds, characteristics, and abilities.
- c. identify and use technology resources that affirm diversity
- d. promote safe and healthy use of technology resources.
- e. facilitate equitable access to technology resources for all students.

For more information on the NETS Project, contact:

Lajeane Thomas, Project Director

Telephone: 318.257.3923

E-Mail: lthomas@latech.edu

Appendix D

Technology Foundation Standards for All Students*

The technology foundation standards for students are divided into six broad categories. Standards within each category are to be introduced, reinforced, and mastered by students. These categories provide a framework for linking performance indicators within the Profiles for Technology Literate Students to the standards. Teachers can use these standards and profiles as guidelines for planning technology-based activities in which students achieve success in learning, communication, and life skills.

Technology Foundation Standards for Students

1. Basic operations and concepts

- Students demonstrate a sound understanding of the nature and operation of technology systems.
- Students are proficient in the use of technology.

2. Social, ethical, and human issues

- Students understand the ethical, cultural, and societal issues related to technology.
- Students practice responsible use of technology systems, information, and software.
- Students develop positive attitudes toward technology uses that support lifelong learning, collaboration, personal pursuits, and productivity.

3. Technology productivity tools

- Students use technology tools to enhance learning, increase productivity, and promote creativity.
- Students use productivity tools to collaborate in constructing technology-enhanced models, prepare publications, and produce other creative works.

4. Technology communications tools

- Students use telecommunications to collaborate, publish, and interact with peers, experts, and other audiences.
- Students use a variety of media and formats to communicate information and ideas effectively to multiple audiences.

5. Technology research tools

- Students use technology to locate, evaluate, and collect information from a variety of sources.
- Students use technology tools to process data and report results.
- Students evaluate and select new information resources and technological innovations based on the appropriateness for specific tasks.

6. Technology problem-solving and decision-making tools

- Students use technology resources for solving problems and making informed decisions.
- Students employ technology in the development of strategies for solving problems in the real world.

Appendix E

Technology Standards for School Administrators TSSA Draft (v4.0)

The Collaborative for Technology Standards for School Administrators (TSSA Collaborative) has facilitated the development of a national consensus on what P-12 administrators should know and be able to do to optimize the effective use of technology. This consensus is presented by the Collaborative (November 2001) as Technology Standards for School Administrators (TSSA).

The Collaborative believes that comprehensive implementation of technology is, in itself, large-scale systemic reform. Leadership plays a key role in successful school reform. The Collaborative's standards, therefore, focus on the role of leadership in enhancing learning and school operations through the use of technology.

These standards are indicators of effective leadership for technology in schools. They define neither the minimum nor maximum level of knowledge and skills required of a leader, and are neither a comprehensive list nor a guaranteed recipe for effective technology leadership. Rather, these standards are a national consensus among educational stakeholders of what best indicates accomplished school leadership for comprehensive and effective use of technology in schools. The standards challenge almost every school administrator in some areas, yet each individual standard is attainable by the professional education leader. Although a national consensus, in no way should these standards inhibit new development, innovation, or progress for schools or for school leadership.

The TSSA Collaborative and the many professionals who contributed to this effort realize the wide range of roles administrators play in schools, even when titles are similar. School and system size, degree of sitebased governance, community characteristics, and strengths of individual administrators are but a few of the parameters that may cause variations in actual job roles. For this reason, wise consumers of these standards will apply this national resource in a way that acknowledges the local context of school leadership.

A rich array of expectations exists for use of these standards. They will find application in:

- administrator preparation and professional development program design
- assessment and evaluation
- role definition and job descriptions
- individual and system accountability
- accreditation of schools and of administrator preparation programs
- certification (credentialing) of administrators
- self-assessment and goal setting
- design of technology tools for school administrators

The audiences for these standards also are varied. School boards, administrators, human resources staff, staff developers, higher education personnel, and state education agencies will make use of this resource. Others include state and federal policy-makers, industry representatives and service providers, professional organizations, parents, taxpayers, and other community constituents. This places priority, then, on clarity and simplicity of language, free from specific education jargon. The document speaks to a variety of audiences, and it encourages accomplished leaders to stay abreast of current strategies and accepted principles as these evolve.

An underlying assumption to these standards is that administrators should be competent users of information and technology tools common to information-age professionals. The effective 21st Century administrator is a hands-on user of technology. Much of the benefit of technology is lost for administrators who rely on an intermediary to do their e-mail, manipulate critical data, or handle other technology tasks for them. While technology empowers administrators by the information it can readily produce and communicate, it exponentially empowers the administrator who masters the tools and processes that allow creative and dynamic management of available information.

Administrators who recognize the potential of technology understand that leadership has a responsibility to ensure digital equity. They must also know that technology can unlock tremendous potential in learners and staff with special and diverse needs. Administrators are responsible for incorporating assistive technologies that enable a school system to more comprehensively serve its constituents.

Highly successful school districts carefully align educational initiatives to address district priorities. Leaders must acknowledge this need for alignment as technology is integrated across the district. The shared vision for technology must be consistent with the district's overall educational vision, and technology plans must smoothly integrate with overall planning for school effectiveness.

The vision of the TSSA Collaborative is that the Technology Standards for School Administrators identify knowledge and skills that constitute the 'core' -- what every P-12 administrator needs regardless of specific job role - and, then extend the core to include the specific needs of administrators in each of three job roles: (1) superintendent and executive cabinet, (2) district-level leaders for content-specific or other district programs, and (3) campus-level leaders including principals and assistant principals. This phase of the effort does not address role-specific standards for business officers or technology directors.

The TSSA Collaborative recommends the standards be communicated as six standards statements along with a corresponding set of performance indicators for each. In addition, there are three sets of role - specific technology leadership tasks describing different expectations in three distinct administrative job roles. Also included are illustrative scenarios of practice corresponding to each job role. For clarity and brevity, performance indicators and leadership tasks that correspond to more than one standard are listed with the most closely-aligned standard.

THE TSSA COLLABORATIVE

Collaborative members include the American Association of School Administrators (AASA), the National School Boards Association (NSBA), the National Association of Elementary School Principals (NAESP), the National Association of Secondary School Principals (NASSP), the Association of Education Service Agencies (AESAs), the International Society for Technology in Education (ISTE), the Consortium for School Networking (CoSN), the North Central Regional Technology Consortium/North Central Regional Educational Laboratory, the Southern Regional Education Board (SREB), the Kentucky Department of Education, the Mississippi Department of Education, the Principals' Executive Program - University of North Carolina, and the College of Education - Western Michigan University.

PARTICIPATING ORGANIZATIONS IN THE TSSA STANDARDS INITIATIVE

Not-for-profit organizations that have applied and been approved by the TSSA Collaborative as Participating Organizations in the TSSA Standards Initiative are committed to supporting the standards by providing expertise in the development and refinement of the standards, assistance in disseminating the standards, and support in implementing the TSSA Standards. Current members are: The American Council on the Teaching of Foreign Languages (ACTFL), California Computer Using Educators (CUE), Corporation for Public Broadcasting (CPB), Louisiana State Department of Education, Maryland Instructional Computer Coordinators Association (MICCA), MASS Networks Educational Partnership (MNEP), Massachusetts Elementary Principals Association (MESPA), Michigan Association of Computer Users in Learning (MACUL), National Educational Computing Association (NECA), Nebraska State Department of Education, New Mexico Council on Technology in Education (NMCTE), Oklahoma Technology Administrators (OTA), Teaching Matters, Inc., Technology and Innovation in Education - South Dakota (TIE), Texas Association of School Administrators (TASA), University of Maryland, Utah Association of Elementary School Principals (UAESP), Virginia Association of School Superintendents (VASS), Virginia Educational Technology Alliance (VETA), Virginia State Department of Education, and the WestED RTEC.

FUNDING AND MANAGEMENT

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Project management is provided by the International Society for Technology in Education (ISTE).

These standards are the property of the TSSA Collaborative and may not be altered without written permission. The following notice must accompany reproduction of these standards:

"This material was originally produced as a project of the Technology Standards for School Administrators Collaborative." Technology Standards for School Administrators TSSA Draft Framework, Standards, and Performance Indicators (v4.0)

- I. Leadership and Vision - Educational leaders inspire a shared vision for comprehensive integration of technology and foster an environment and culture conducive to the realization of that vision.
 - Educational leaders:
 - a. facilitate the shared development by all stakeholders of a vision for technology use and widely communicate that vision.
 - b. maintain an inclusive and cohesive process to develop, implement, and monitor a dynamic, long-range, and systemic technology plan to achieve the vision.
 - c. foster and nurture a culture of responsible risk-taking and advocate policies promoting continuous innovation with technology.
 - d. use data in making leadership decisions.
 - e. advocate for research-based effective practices in use of technology.
 - f. advocate on the state and national levels for policies, programs, and funding opportunities that support implementation of the district technology plan.

- II. Learning and Teaching - Educational leaders ensure that curricular design, instructional strategies, and learning environments integrate appropriate technologies to maximize learning and teaching.

Educational leaders:

- a. identify, use, evaluate, and promote appropriate technologies to enhance and support instruction and standards-based curriculum leading to high levels of student achievement.
 - b. facilitate and support collaborative technology-enriched learning environments conducive to innovation for improved learning.
 - c. provide for learner-centered environments that use technology to meet the individual and diverse needs of learners.
 - d. facilitate the use of technologies to support and enhance instructional methods that develop higher-level thinking, decision-making, and problem-solving skills.
 - e. provide for and ensure that faculty and staff take advantage of quality professional learning opportunities for improved learning and teaching with technology.
- III. Productivity and Professional Practice - Educational leaders apply technology to enhance their professional practice and to increase their own productivity and that of others.
- Educational leaders:
- a. model the routine, intentional, and effective use of technology.
 - b. employ technology for communication and collaboration among colleagues, staff, parents, students, and the larger community.
 - c. create and participate in learning communities that stimulate, nurture, and support faculty and staff in using technology for improved productivity.
 - d. engage in sustained, job-related professional learning using technology resources.
 - e. maintain awareness of emerging technologies and their potential uses in education.
 - f. use technology to advance organizational improvement.
- IV. Support, Management, and Operations - Educational leaders ensure the integration of technology to support productive systems for learning and administration.
- Educational leaders:
- a. develop, implement, and monitor policies and guidelines to ensure compatibility of technologies.
 - b. implement and use integrated technology-based management and operations systems.
 - c. allocate financial and human resources to ensure complete and sustained implementation of the technology plan.
 - d. integrate strategic plans, technology plans, and other improvement plans and policies to align efforts and leverage resources.
 - e. implement procedures to drive continuous improvement of technology systems and to
 - f. support technology replacement cycles.
- V. Assessment and Evaluation - Educational leaders use technology to plan and implement comprehensive systems of effective assessment and evaluation.
- Educational leaders:
- a. use multiple methods to assess and evaluate appropriate uses of technology resources for learning, communication, and productivity.
 - b. use technology to collect and analyze data, interpret results, and communicate findings to improve instructional practice and student learning.
 - c. assess staff knowledge, skills, and performance in using technology and use results to facilitate quality professional development and to inform personnel decisions.
 - d. use technology to assess, evaluate, and manage administrative and operational systems.
- VI. Social, Legal, and Ethical Issues - Educational leaders understand the social, legal, and ethical issues related to technology and model responsible decision-making related to these issues.

Educational leaders:

- a. ensure equity of access to technology resources that enable and empower all learners and educators.
- b. identify, communicate, model, and enforce social, legal, and ethical practices to promote responsible use of technology.
- c. promote and enforce privacy, security, and online safety related to the use of technology.
- d. promote and enforce environmentally safe and healthy practices in the use of technology.
- e. participate in the development of policies that clearly enforce copyright law and assign ownership of intellectual property developed with district resources.

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"This material was originally produced as a project of the Technology Standards for School Administrators Collaborative."

Appendix F

Jackson Area Career Center Technology Plan TECHNOLOGY PLAN SUMMARY SHEET

District: Jackson County Intermediate School District: Jackson Area Career Center http://www.jacc-mi.net	Address: 6800 Browns Lake Road Jackson, Michigan 49201	Contact: Denise Belt, Principal Jeffery Hinkle, Assistant Principal Bill Farrant, Technology Coordinator
Phone: (517) 768 – 5200 x 6330	Fax: (517) 787-2844	Email: Jeffrey.hinkle@jcisd.org william.farrant@jcisd.org
Years covered by this plan: 2003 to 2006		

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MDE Technology Planning Web Site:

<http://techplan.org>

Jackson Area Career Center

School Profile

School Mission Statement

THE CAREER CENTER WILL PROVIDE OPPORTUNITIES, WHICH ENCOURAGE PEOPLE TO EXPLORE CAREERS AND DEVELOP TECHNICAL SKILLS, KNOWLEDGE AND ACTIVITIES, REQUIRED TO ATTAIN AND ENHANCE EMPLOYMENT, CONTINUING EDUCATION AND A FULLER LIFE.

SCHOOL BUILDING
Jackson Area Career Center
6800 Browns Lake Road
Jackson, Michigan 49201

School Profile

Established in 1976, Jackson Area Career Center is a career and technical education facility serving Jackson and Hillsdale Counties. The Center provides career and technical training opportunities in thirty different programs for students who attend twenty-one different high schools in the two counties.

Jackson Area Career Center's professional staff works in partnership with parents, local schools, local human service organizations and businesses to develop technical skills required to attain and enhance employment for the youth of the community.

TECHNOLOGY PLAN INTRODUCTION

Background:

The Jackson Area Career Center (JACC) has been involved in technology planning since 1976. We believe that as a tool, technology must be applied to all areas. It is fundamental to communication, creative expression, knowledge and skill acquisition, problem solving, and information management.

The purpose of this document is to enhance curriculum, not to determine curriculum. The Curriculum at JACC is reviewed every year at which time changes are made and approved. It is the duty of the individual curriculum areas to determine appropriate learner outcomes. The tools we recommend in this document can be used across the curriculum and are to enhance and support all teaching and learning. The selection of instructional materials, or computer software, is reviewed through a coordinated effort of the classroom instructor the technology coordinator and technology administrator as well as the School Technology Committee.

We believe that by integrating technology with all curricular areas, students will become technologically literate individuals. Such an individual:

- Understands the role and impact of technology upon society
- Accepts the responsibilities associated with living in the technologically oriented Information age
- Identifies when to use technology to solve a problem or accomplish a task and then selects and utilizes the appropriate technological system
- Uses technology as a tool for obtaining information, organizing, and creative expression;
- Recognizes the ever-changing nature of technology and is flexible in adapting these changes to new tasks

School technology vision/mission statement:

The Mission of this plan is to assure that all learners are prepared to adapt to the challenges of the future as global citizens through the access and effective use of technology in gathering and using information, communicating effectively and making responsible informed decisions.

How the technology plan ties in with the school mission and school improvement plan:

Major goals of the technology plan:

- Keep technology current within the district and in support of the curriculum
- Facilitate the use of technology into all grades and subjects
- Provide direction in professional development opportunities

Goals for staff and students:

- Develop competence in all appropriate technologies
- Embrace real world and classroom opportunities to utilize technology in all subjects as it is deemed beneficial to the learning experience

GUIDING DOCUMENTS FOR A MICHIGAN TECHNOLOGY PLAN

1. Required Elements of a Technology Plan
<http://techplan.org/>
2. National Educational Technology Standards Project
<http://cnets.iste.org/>
3. Michigan Curriculum Framework
<http://www.mde.state.mi.us/reports/>
4. NSSE Indicators for Quality for Information Systems in K-12 Schools (National Study of School Evaluation). Library of Congress Catalog No. 95-71988.1996
5. Guiding Questions for Technology Planning: North Central Regional Technology Education Consortium
<http://www.ncrel.org/>

CONSORTIUM ACKNOWLEDGMENT

Jackson Area Career Center, through the Jackson County Intermediate School District, is a member of the [South Central Network Consortium of Michigan \(SCNC\)](#). This consortium is administered through Michigan State University.

The Southeast Central Network Consortium of Michigan (SCNC) is a group of Universities, Community Colleges, Intermediate School Districts, and School Districts working together to provide Internet access to all of the school districts in south central Michigan.

TECHNOLOGY PLANNING TEAM

Name:

Position:

Name:	Position:
Denise Belt	Principal
Jeffery Hinkle	Assistant Principal
William Farrant	Technology Coordinator
Steve Keinath	Instructor E - Commerce
Gail Mahoney	Instructor Environmental Services
Stephanie Palmer	Math / Science Consultant
Ed Redies	Instructor CAD
Crvstal Shaw	Instructor Pre-Teaching
Diane Stevens	Counselor
Judy Woodard	Secretary

INFRASTRUCTURE

The Jackson Area Career Center currently has a building-wide fiber optic network backbone that connects all classrooms. Within the building, there is fiber running from the MDF of JACC to wiring closet spaces on both ends of the building. CAT 5 cable runs from the wiring closets to the classrooms for a 100TX connection to the desktop computer. All classrooms are connected to the district data network. Our On-Site Building Trades classroom is connected via phone using dial-up for internet connection.

The network infrastructure consists of a Gigabit Ethernet backbone.

The core switch of our network is a Lucent Cajun 550, located at the Jackson County Intermediate School District. The school network currently has over 450 computers. We manage the network traffic with VLAN's.

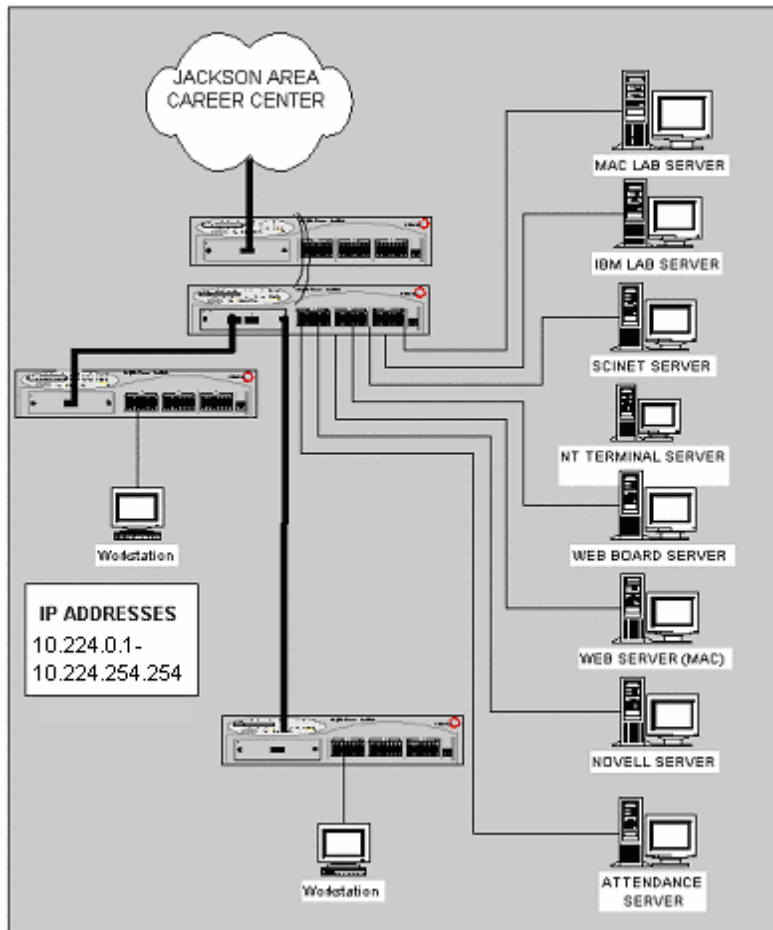
High speed Internet access is provided via fiber-optic cable using a Gigabit Ethernet link to the Jackson County Intermediate School District.

With the Internet connection, students, staff and the community have access to a large variety of on-line classes from [Michigan Virtual University](#) and [Michigan Virtual High School](#) to dual-enrollment offerings with colleges.

JACC has adopted several technology standards to maintain a quality network and computer systems district wide. These standards include but are not limited to the following:

- Common student management software school wide
- Total cost of ownership program designed to keep our hardware and software current
- Multimedia system with sound and CDROM installed on all computers
- High speed Internet access on the school network
- Content filter in use on internet access (N2H2)
- Computer system replacement a minimum of every four years
- Network storage space provided for every student
- E-mail accounts for all school employees and classroom level e-mail accounts where curriculum requires

Jackson Area Career Center Data Infrastructure



COLLABORATIONS



JACC offers computer classes to community members through our Adult Education Program several times during the year.

JACC is also a host site for [Jackson Community College](#) classes.

Other sources of training are available through the [Jackson County Intermediate School District](#) and also through professional organizations such as [MACUL](#).

PROFESSIONAL DEVELOPMENT

BACKGROUND

Jackson Area Career Center

The JACC is connected to the district network and therefore the Internet through the offices and media centers. The school has 398 workstation computers in labs that are also connected to the network. Individual classrooms are connected to the network. In this building teachers and/or instructional assistant employees with extensive computer skills run the labs. As classroom teachers use the labs with their students they also have the opportunity to update their skills while the students are learning under the direction of the lab supervisor.

Current and Future Plans

As one might expect, there are teachers at each building who wholeheartedly embrace the use of technology in their classes as well as a few unwilling to try to learn how to turn on a computer. **All secondary teachers are trained and required to use the grading software beginning in the 2002-2003 school year.**

During the 2002-2003 school year one day each week was allocated for professional development in the use of technology. A series of sessions were set up to accommodate the needs of staff member from Beginning Computers through Web Page Design. **This was well received and is being rescheduled during the 2003-2004 school year.**

In addition to professional development scheduled during the school day, a series of after-school workshops will be scheduled throughout the upcoming school year to provide teachers an opportunity to expand their learning in technology. These will be scheduled based on the interest generated by teachers in their own development.

JACC has a professional development planning committee that meets several times each year to plan the building's professional development activities. Plans for professional development days are developed at least one semester prior to the scheduled dates. Building members of the Technology Committee serve as members of the professional development planning committees. These members will help plan technology professional development activities as identified by the technology committee and teachers in the building.

Funding for professional development activities is a function of the based budget in salaries, benefits and equipment.

TECHNICAL ASSISTANCE/SUPPORT



Jackson County Intermediate School District hosts a web site with a technical-support component.

<http://www.icisd.org:8080/>

This site is available 24 hours a day, seven days a week to assist our staff.

Staff is encouraged to use [Michigan Virtual University](#) as an additional resource.

TECHNICAL SUPPORT

JACC currently provides several layers of support for staff.

The district employs:

- One full time district Technology Coordinator
- Four part – time co-op students

Building teachers and media center specialists also provide additional technical support as well as instructional assistants.

In addition to labor, there are many procedures in place that help maintain the highest state of operations, including:

- A database which tracks technology and requests for assistance
- Computer equipment scheduled for replacement at least every four years
- Network hardware under a service contract for additional support
- Computer equipment cleaned annually and inspected for operational readiness
- A very aggressive anti-virus program in place to intercept viruses before they become a bigger problem using Norton AV and F-Prot
- A managed desktop network which limits students from modifying the computer settings

These practices provide timely cost-effective support in our district.

SUPPORTING RESOURCES/FUNDING

JACC currently commits \$291,600 annually to the acquisition and support of district technology, including software. This funding is secured through a Capitol Outlay budget and standard budget line items.

Desktop and notebook computer equipment is obtained via capital outlay. Computer purchases are planned and software licenses are purchased concurrently to ensure compliance with established copyright laws.

A full-time technical staff supports network hardware, computer systems and printers. Additional network support is provided as part of a service contract.

(Please see budget sample on the next page for current funding plan.)

In addition, staff members annually seek a variety of local, state and federal grants to improve curricular areas.

Because of the nature of grant funding, a decision was made to not rely on this type of funding to support operations. Grant funding is sought for special projects as needed.

Professional development training of the staff is funded from our different areas of the Career and Technical Education Budget, depending on the nature of the training / professional development.

PROJECTED COST

Jackson Area Career Center

TECHNOLOGY BUDGET – PROJECTED COST

Item	Local District	Grants	Donations	Fiscal Year
Salaries	\$54,000			2003
Benefits	\$18,000			2003
Travel	\$300			2003
Conference	\$300			2003
Supplies	\$4,000			2003
Contracted Services	\$10,000			2003
Maintenance	\$10,000			2003
License Fees	\$35,000			2003
Misc. Equipment	\$10,000			2003
Equipment Purchases	\$150,000			2003
Building Discretionary Funding (Improvement of Instruction)	\$25,000			2003
Total Operating	\$291,600			

EVALUATION OF PROGRESS



JACC has a Technology Committee that meets regularly. This committee has two objectives:

- The first objective is to determine how to best integrate technology into the curriculum for the maximum benefit of JACC students.
- The second objective is to assess the stated goals contained within the Technology Plan. The committee accomplishes this objective by regularly surveying staff and testing students to assess progress in mastering the benchmarks defined in the Technology Plan.

This information is then returned to the Technology Committee for evaluation for possible proposed changes to the Technology Plan.

EVALUATION PLAN

EVALUATION PLAN - YEAR 2003				
Required Components	Accomplishments	Progress Toward Goals	Focus Areas for Improvement	Notes
Infrastructure	Complete	85%	Re-Switch Rooms	
Curriculum Integration	Ongoing	50%		
Collaboration	Ongoing		Seek additional organizations to partner with	
Professional Development	Ongoing		Determine needs	
Technical Support	Ongoing	75%	Train staff	
Supporting Resources	Ongoing			
Timetable	Ongoing		Coordinated with JCISD	
Cost/Funding	Ongoing	90%		
Coordination of Funding Resources	Ongoing	90%		
Acceptable Use Policy	Ongoing	Complete		
Communications (Optional)	Ongoing	Complete	Add a local access cable channel	
Impact on Student Achievement	Ongoing		Assessing Impact	

COMMUNICATIONS / PUBLIC RELATIONS

JACC publishes a district newsletter five times each year that addresses numerous relevant school issues.

As part of the South Central Network Consortium, we also operate our own web server that contains technology-related information to share with the public.

The district also employs a public relations specialist who is responsible for communicating with internal and external audiences on timely and topical issues.

List still required items:

Updated technology content standards, with benchmarks

Equipment cycling four year plan for computers

Equipment cycling six year plan printers

Hardware software purchasing policy

Professional Development calendar

Appendix G – Acceptable Use Policy



Jackson County Intermediate School District Technology Use and Safety Policy

POLICY

The School Board (hereinafter referred to as the Board) of the Jackson County Intermediate School District, (hereinafter referred to as the District) recognizes that as technologies affect the manner in which information may be accessed, communicated and transferred by members of society, those changes may also alter instruction and student learning. Telecommunications, electronic information services and networked services significantly alter the information landscape by opening schools, classrooms and library media centers to a broader array of resources. The Board generally supports access by students to rich information resources along with the development by staff of appropriate skills to analyze and evaluate such resources.

In making decisions regarding student access to telecommunications and networked information resources, the Board considers its own stated educational mission, goals and objectives. This policy requires that all instructional and library media materials support and enrich the curriculum while taking into account the varied instructional needs, learning styles, abilities and developmental levels of the students.

Telecommunications, including video, audio and text services, because they may be connected to any publicly available source in the world, will open classrooms to electronic information resources which may not have been specifically chosen or previewed for use by students of various ages.

In particular, the Internet is a collection of interconnected computer networks around the world that makes it possible to share information almost instantly. The networks are owned by countless commercial, research, governmental and educational organizations. The Internet expands classroom and library media center resources by making information, images and even computer software from places otherwise impossible to reach available to students, teachers, librarians and media specialists. Access to these resources can yield individual and group projects, collaboration, curriculum materials and idea sharing. Internet access also makes contact with people all over the world, bringing into the classroom experts in every content area.

SCOPE

The Technology Use and Safety Administrative Guidelines delineate the procedures in place to ensure that the District complies with all Federal, State and Local statutes regarding:

- Hardware
- Software
- Network/Internet
- Electronic Mail
- Security
- Discipline
- Copyright

The Administrative guidelines also explain the Technology Protection Measures used to block or filters Internet access to pictures and content that:

- Are Obscene
- Contain child pornography
- Are harmful to minors
- The district determines is “inappropriate for minors”

The Technology Use and Safety Administrative Guidelines also outline the specific responsibilities of the District, Staff and Students.

IMPLEMENTATION

The Board authorizes the Office of the Superintendent to prepare appropriate Administrative Guidelines for implementing this policy and for reviewing and evaluating its effect on instruction and student achievement. The Office of the Superintendent is also authorized to revise the Administrative Guidelines to incorporate recent changes in Federal, State or Local statutes to ensure compliance. Both the Policy and the Guidelines shall be available for review by parents, guardians, students, staff, and other members of the community. Further, all provisions of both Policy and the Guidelines are subordinate to local, state and federal statute.



Jackson County Intermediate School District Technology Use and Safety Policy Administrative Guidelines

- I) Foreword
- II) Hardware
- III) Software
- IV) Network/Internet
- V) Electronic Mail
- VI) Security
- VII) Discipline
- VIII) Copyright
- IX) Staff Summary
- X) Student Summary

I. Foreword

Use of technology at Jackson County ISD, hereinafter referred to as the District, is a privilege extended to students and staff to enhance learning and exchange information. Use must be consistent with the mission of the District, and where appropriate, must comply with the stated purposes and use policies of any other networks used.

Users are responsible for using technology only for facilitating learning and exchanging information consistent with the mission of the District. Users must not use District technology on behalf of outside organizations without administrative approval. District technology is a closed forum. Occasional authorized approval for non-school related purposes or on behalf of outside organizations does not give rise to a right to such use in the future and does not create a limited open forum.

Messages and documents are the property of the District, and the District has the right to supervise the use of such property. Users shall have no expectation of privacy when using District technology. The District also has the right to revoke the user's access privileges any time for any reason.

Unless otherwise specified, the following regulations shall apply equally to all students, employees, volunteers, and all other users of the District network. Employees, volunteers, and users outside the school community may have additional obligations or access privileges owing to the nature of their positions.

With the privileges of membership in the District technology community comes responsibility. Users need to familiarize themselves with these responsibilities. Failure to follow them will result in loss of network privileges and/or disciplinary action as outlined in the Code and respective Board of Education policies.

The District shall not be held responsible for any individual's inappropriate use of its technology in violation of the law.

Each user shall be held personally, civilly and criminally responsible for any violations of the law. Each user of technology shall read and sign the Statement of Understanding or the Staff Summary, before using District technology. Use of District technology shall constitute agreement and consent to abide by the terms set forth in the Technology Use and Safety Policy.

A violation of the Technology Use and Safety Policy will be documented in a District Incident Report, and processed according to District procedures.

II. Hardware

A. User Privileges

Users have the privilege to use all hardware for which they are authorized and have received training. Use of District technology shall constitute agreement and consent to abide by the terms set forth in the Technology Policy.

B. User Responsibilities

1. Users are responsible for using technology only for facilitating learning and exchanging information consistent with the mission of the District.
2. Users are responsible for properly using and caring for the hardware. Users are to seek assistance if necessary.
3. Users must not use the hardware on behalf of outside organizations without administrative approval.
4. Users must not use the hardware for illegal activity.
5. Users must not use the hardware to find obscene or pornographic material.
6. Users must not disrupt the operation of individuals or the technology through altering or abusing the hardware.
7. Student users must use the hardware under the supervision of a staff member or his/her authorized representative.
8. Users must follow all copyright guidelines as stated in Section VIII.
9. Users are responsible for any costs or fees or repair costs for damages as outlined in Section VII.
10. Any misuse of the hardware will result in disciplinary action as stated in Section VII, and may also result in legal action if appropriate.

C. District Responsibilities

1. The District does not warrant that the functions of the system will meet any specific requirements the user may have, or that it will be error-free, or that its operation will not be interrupted. The District will not be liable for any direct or indirect, incidental, or consequential damages (including lost data, information, or use time) sustained or incurred in connection with the use, operation, or inability to use the hardware.
2. The District does not warrant any system to be absolutely secure.
3. The primary purpose of the District hardware shall be in support of the academic program and shall take precedence over professional support, and general information.
4. The Superintendent or his/her designee will periodically make determinations on whether specific uses of the hardware are consistent with this policy. The District reserves the right to monitor use. Therefore, the District reserves the right to limit or deny access any time, for any reason.
5. District staff will demonstrate good faith efforts to supervise use of hardware under their charge.

III. Software

A. User Privileges

Users have the privilege to use all software for which they are authorized and have received training. Use of District technology shall constitute agreement and consent to abide by the terms set forth in the Technology Policy.

B. User Responsibilities

1. Users are responsible for using software only for facilitating learning and exchanging information consistent with the mission of the District.
2. Users must not place unauthorized information, computer viruses, or harmful programs on or through the computer system in either public or private files or messages.
3. Users must not disrupt the operation of individuals or the technology through altering or abusing the software.
4. Student users must use the software under the supervision of a staff member or her/his authorized representative.
5. Users are responsible for properly using and caring for software.
6. Users are to seek assistance if necessary.
7. Users must not use software on behalf of outside organizations, without administrative approval.
8. Users must not use software for illegal activities.
9. Users must not use software to create or find obscene or pornographic material.
10. Users must follow all copyright guidelines as stated in Section VIII (this includes any illegally installed copyrighted software, or the transferring of files, shareware, or software from information services without permission of the facilitator.)
11. Users are responsible for managing personal files and deleting old files in a timely manner.
12. Users are responsible for any costs or fees or repair costs for damages to the software as outlined in Section VII.

13. Any misuse will result in disciplinary action as stated in Section VII, and may result in legal action if appropriate.

C. District Responsibilities

1. The District does not warrant that the functions of any District-authorized software will meet any specific requirements that the user may have, or that it will be error free, or that its operation will not be interrupted. The District will not be liable for any direct or indirect, incidental, or consequential damages (including lost data, information, or time) sustained or incurred in connection with the use, operation, or inability to use the District software.
2. The District does not warrant any system to be absolutely secure.
3. The primary purpose of the District software shall be in support of the academic program and shall take precedence over professional support, general information, and recreation.
4. The Superintendent or his/her designee will periodically decide whether specific uses of the software are consistent with this policy. Therefore, the District reserves the right to monitor use. The District reserves the right to limit or deny access any time for any reason.
5. District staff will demonstrate good faith efforts to supervise the use of software under their charge.

IV. Network/Internet

A. User Privileges

Users have the privilege to use all District network resources both internal and external (such as Internet) for which they are authorized and have received training. Use of District technology shall constitute agreement and consent to abide by the terms set forth in the Technology Policy.

B. User Responsibilities

1. Users are responsible for using the Network only for facilitating learning and exchanging information consistent with the mission of the District.
2. The student user may only log on and use the Network under the immediate supervision of a staff member or authorized representative and only with an appropriate account number.
3. The student is responsible for the use of her/his account and/or access privilege. Any problems that arise from the use of a student's account are the responsibility of the account holder.
4. Users must use only their account ID. Use of an account by someone other than the registered account holder is forbidden.
5. Users must not intentionally seek information on, obtain copies of (misappropriating), or modify files or other data belonging to other users.
6. Users must not misrepresent others on the Network, or represent others without being explicitly authorized to do so.
7. Users must not disrupt the operation of the Network through altering or abusing the hardware or software on the Internet.
8. Users must not use the Network for sexual harassment, hate mail, profanity, vulgar statements, discriminatory remarks, defamatory statements or other remarks that would constitute noncompliance with the Districts' policies dealing with sexual, racial, or other types of harassment.
9. Users must not access pornographic material or educationally unsuitable files or files dangerous to the integrity of the network.
10. Users must not place unauthorized information, computer viruses, or other harmful programs on or through the computer system in either public or private files or messages, or otherwise interfere with others' use of the Network.
11. Use of the Network is for school purposes. Personal use should be limited according to the Superintendent's Administrative Guidelines. Staff members are encouraged to keep personal records and personal business at home.
12. Users are responsible for managing their personal files and deleting old files in a timely manner.
13. Users may not use the Network on behalf of outside organizations, without administrative approval.
14. Users must follow all copyright guidelines as stated in Section VIII. (This includes illegally installed copyrighted software, or the transferring of files, shareware, or software from information services and electronic bulletin boards without the permission of the facilitator.)

15. Users are responsible for any costs or fees for information services or repair costs for damages to the Network as outlined in Section VII.
16. Any misuse will result in disciplinary action as stated in Section VII, and may also result in legal action if appropriate.

C. District Responsibilities

1. The District operates a Technology Protection Measure that blocks or filters Internet access to pictures and content that:
 - a) Are Obscene
 - b) Contain child pornography
 - c) Are harmful to **students**
 - d) The district determines is “inappropriate for **students**”
2. The District blocks **students** access to e-mail, chat rooms, and other forms of direct electronic communications (e.g. Instant Message Services).
3. The District prohibits unauthorized disclosure, use and dissemination of personal identification information regarding students using District technology.
4. The District prohibits computer hacking and other unlawful activities by students using District technology.
5. The District employs measures (such as supervision and monitoring) to restrict **students’** access to material harmful to **students**.
6. The District does not warrant that the functions of any District-authorized software will meet any specific requirements that the user may have, or that it will be error free, or that its operation will not be interrupted. The District will not be liable for any direct or indirect, incidental; or consequential damages (including lost data, information, or time) sustained or incurred in connection with the use, operation, or inability to use the Network.
7. The District does not warrant any system to be absolutely secure.
8. The primary purpose of the Network shall be in support of the academic program and shall take precedence over professional support, general information, and recreation.
9. The District reserves all rights to material stored in files on the Network that are generally accessible to others and will remove any material that the District, at its sole discretion, believes may be unlawful, obscene, pornographic, abusive, or otherwise objectionable educationally unsuitable or materially and substantially disruptive.
10. The Superintendent or his/her designee will periodically decide whether specific uses of the Network are consistent with this policy. The District reserves the right to log Internet use and monitor fileserver space utilization by users. Therefore, the District reserves the right to limit or deny access any time for any reason.
11. District staff will demonstrate good faith efforts to supervise the use of the Network under their charge.
12. The use of District technology constitutes consent, under the Electronic Communications Privacy Act, on the part of all users to allow the District and its agents to intercept and access the e-mail and network/internet history information of each individual user.

V. Electronic Mail

A. User Privileges

Users have the conditional privilege to use electronic mail for which they are authorized and have received training. Staff may send e-mail to any member on the Network or the Internet; prior approval is not required. Use of District technology shall constitute agreement and consent to abide by the terms set forth in the Technology Policy.

B. User Responsibilities

1. Users are responsible for using e-mail only for facilitating learning and exchanging information consistent with the mission of the District.
2. Users must use only their account ID. Use of an account by someone other than the registered account holder is forbidden.
3. Users must not intentionally seek information on, obtain copies of (misappropriating), or modify files or other data belonging to other users.
4. Users must not misrepresent others on e-mail, or represent others without being explicitly authorized to do so.

5. Users must not disrupt the operation of the e-mail through altering or abusing the hardware or software on e-mail.
6. Users must not use e-mail for sexual harassment, hate mail, profanity, vulgar statements, discriminatory remarks, defamatory statements or other remarks that would constitute noncompliance with the Districts' policies dealing with sexual, racial, or other types of harassment.
7. Users must not place unauthorized information, computer viruses, or other harmful programs on or through the computer via e-mail.
8. Use of the e-mail is for school purposes. Personal use should be limited according to the Superintendent's Administrative Guidelines. Staff members are encouraged to keep personal records and personal business at home.
9. Users must follow all copyright guidelines as stated in Section VIII. (This includes illegally installed copyrighted software, or the transferring of files, shareware, or software from information services and electronic bulletin boards without the permission of the facilitator.)
10. Users are responsible for any costs or fees for information services or repair costs for damages to the e-mail system as outlined in Section VII.
11. Any misuse of e-mail will result in disciplinary action as stated in Section VII, and may also result in legal action if appropriate.
12. Users may not use e-mail on behalf of outside organizations, without administrative approval.

C. District Responsibilities

1. The District blocks **students** access to e-mail, chat rooms, and other forms of direct electronic communications (e.g. Instant Message Services).
2. The District does not warrant that the functions of the system will meet any specific requirements that the user may have, or that it will be error free, or that its operation will not be interrupted. The District will not be liable for any direct or indirect, incidental or consequential damages (including lost data, information, or time) sustained or incurred in connection with the use, operation, or inability to use the system.
3. The District does not warrant any system to be absolutely secure.
4. The primary purpose of the District electronic mail system shall be in support of the academic program and shall take precedence over professional support, general information, and recreation.
5. The District reserves all rights to material stored in files on its e-mail system that are generally accessible to others and will remove any material that the District, at its sole discretion, believes may be unlawful, obscene, pornographic, abusive, or otherwise objectionable educationally unsuitable or materially and substantially disruptive.
6. The Superintendent or his/her designee will periodically decide whether specific uses of e-mail are consistent with this policy. The District reserves the right to log e-mail use and monitor fileserver space utilization by users. Therefore, the District reserves the right to limit or deny access any time for any reason.
7. District staff will demonstrate good faith efforts to supervise the students use of the Network under their charge, as appropriate to the age level.
8. The use of District technology constitutes consent, under the Electronic Communications Privacy Act, on the part of all users to allow the District and its agents to intercept and access the e-mail and network/internet history information of each individual user.

VI. Security

A. User Privileges

1. Users may expect to use the technology free of harassment of any kind, either physical or electronic.
2. Staff members have the privilege to use technology resources consistent with professional development needs.
3. Users have the privilege to use all authorized technology for which they have received training. Each person using the technology must complete the Statement of Understanding form. Use of District technology shall constitute agreement and consent to abide by the terms set forth in the Technology Policy.

B. User Responsibilities

1. Users experiencing harassment must report the problem immediately to the designated staff member.
2. Users identifying a security problem must notify the technology facilitator in charge. The problem is not to be shown to anyone.
3. Users are responsible for using technology only for facilitating learning and exchanging information consistent with the mission of the District.
4. Any relocation, removal, or modification of the technology equipment must have the permission of the facilitator.
5. Users must use only the accounts and account numbers assigned to them. They are responsible for the use of those accounts and access privileges. They are not to share accounts or leave accounts unattended. They are not to publish, share, or discuss passwords.
6. Users must use real names. Anonymity and pseudonyms are not allowed.
7. Users will not abuse the rights and property of others by intentionally seeking information on, or modifying, the files of others; nor will users place unauthorized information, computer programs or viruses in either the public or private files of others or the Network.
8. Users must comply with the Districts' policies dealing with sexual, racial, or other types of harassment. Users will not divulge personal data to which they have access without explicit authorization to do so.
9. Users must not access pornographic material, inappropriate text files, or files dangerous to the integrity of the network.
10. Users are responsible for any costs or fees for information services or repair costs for damages as outlined in Section VII.
11. Any misuse will result in disciplinary action as stated in Section VII.

C. District Responsibilities

1. The District does not warrant that the functions of the system will meet any specific requirements that the users may have, or that it will be error-free, or that its operation not be interrupted. The District will not be liable for any direct or indirect, incidental, or consequential damages (including lost data information, or use time) sustained or incurred.
2. The District does not warrant any system to be absolutely secure.
3. The primary purpose of the District technology shall be support of the academic program and shall take precedence over professional support, general information, and recreation.
4. The District reserves the right to review materials stored in files on the Network that are generally accessible to others and will remove any material that the District, at its sole discretion, believes may be unlawful, obscene, pornographic, abusive, or otherwise objectionable educationally unsuitable or materially and substantially disruptive.
5. The Superintendent or his/her designee will periodically decide whether specific uses of the technology are consistent with this policy. The District reserves the right to monitor use. The District reserves the right to limit or deny access any time, for any reason.
6. District staff will demonstrate good faith efforts to supervise technology under their charge.

VII. Discipline

Users violating the privileges outlined in the District Technology Use and Safety Policy will be subject to disciplinary action. Violations include but are not limited to:

1. Intentionally seeking information on, obtaining copies of (misappropriating), or modifying files, other data, passwords belonging to other users.
2. Misrepresenting others on the Network, or representing others without being explicitly authorized to do so.
3. Disrupting the operation of the Network through alteration or abuse of the hardware or software.
4. Malicious use of the Network through hate mail, profanity, vulgar statements, discriminatory remarks or other noncompliance with the Districts' policies dealing with sexual, racial, or other types of harassment.
5. The placing of unauthorized information, computer viruses, or harmful programs on or through the computer system in either public or private files or messages, or otherwise interfering with others' use of the Network.
6. Illegal installation of copyrighted software.

7. Unauthorized downloading, copying (transmission), or use of licensed or copyrighted software.
8. Transferring files, shareware, or software from information services and electronic bulletin boards without permission.
9. Using a computer I.D. or account, other than his/her own.
10. Allowing anyone to use another's account.
11. Access to the Network and Internet without permission.

Student users violating any of the above regulations will be subject to the following disciplinary action:

Students will be subject to a range of consequences for violating this policy including, but not limited to losing computer privileges, suspensions from school and expulsion, depending on the severity of the infraction. All offenses will be recorded in the student's permanent file.

Additional Action:

All users violating the above code may face additional disciplinary action deemed appropriate in keeping with the disciplinary policies and guidelines of the school.

Cases in which could involve violations of state, local or federal laws could result in criminal prosecution and/or requirement of financial restitution.

VIII. Copyright

A. User Privileges

Users have the privilege to use all hardware or software for which they are authorized and have received training. Use of District technology shall constitute agreement and consent to abide by the terms set forth in the Technology Policy.

B. User Responsibilities

1. The use of copyrighted software without authorization is prohibited. Users are further prohibited from installing any copyrighted software or materials on the District hardware without proper authorization.
2. Users are prohibited from copying copyrighted materials from software, networks or other electronically accessible sites, without proper authorization.
3. Users must follow these copyright guidelines in the use of hardware and software, and in the transmission or copying of any text or files. Plagiarism rules apply to the electronic medium and to print materials.
4. Users must assume that **NOTHING ON THE INTERNET IS IN THE PUBLIC DOMAIN** unless the author specifically puts notice there, or if the information is used after the expiration of the copyright. If any use is found to be illegal, the user is responsible.

C. District Responsibilities

1. The Superintendent or his/her designee will periodically decide whether specific uses of the technology are consistent with respect to copyright law. The District reserves the right to monitor use. The District reserves the right to limit or deny access any time, for any reason.
2. The Superintendent or his/her designee reserves the right to review materials stored in files on the Network that are generally accessible to others and will remove any material that the District, at its sole discretion, believes to be a violation of copyright. The District reserves the right to remove a user account to prevent any further unauthorized activity.
3. The Superintendent or his/her designee will make reasonable steps to inform all staff and students of the District adherence to copyright policy and procedure.

IX. Staff Summary

The District considers technology a tool for teaching and learning and encourages the responsible use of computers and related technology in the District.

Listed below is a summary of the Technology Use and Safety Policy. Please read the full policy before signing below. Some aspects of the policy may already be addressed in other District policies; e.g., the policies on harassment, copyright, and supplemental materials selection.

1. All use of the District technology must be in support of education and be consistent with the Technology Use and Safety Policy of the District. (Foreword)
2. Users have the privilege to use all of the technology for which they have had training. Anyone using the technology is responsible for the preservation and care of that technology. (Sections I, II, III, IV)
3. Accounts are to be used only by the owner or users authorized by the owner. Sharing of the passwords is prohibited. (Section IV, V)
4. Real names must be used; no pseudonyms are allowed. Additional personal information must not be shared over the Internet. (Section IV, V)
5. Users experiencing harassment or receiving requests for personal information should report the problem. (Section V)
6. Technology users identifying a security problem or inappropriate use must notify the proper authority. (Section IV, V, VI)
7. The use of unauthorized software is prohibited. (Section III, VII)
8. Staff must demonstrate good faith efforts to supervise students' use of the technology under their charge. (All Sections)
9. Copyright laws must be followed. (Section II, III, VIII)

Use of District technology shall constitute agreement and consent to abide by the terms set forth in the Technology Use and Safety Administrative Guidelines as outlined in the above summary.

User has received and read the “Technology Use and Safety Administrative Guidelines” and agrees to the terms set forth in the Administrative Guidelines.

Signed

Date

X. Student Summary

The District considers technology a tool for teaching and learning and encourages the responsible use of computers and related technology in District classrooms.

This is a summary of the Technology Use and Safety Administrative Guidelines. All students and parents are encouraged to read the full Administrative Guidelines before signing this Statement of Understanding. All students and parents must sign the Statement of Understanding before using District technology.

1. All use of the District technology must be in support of education. (Administrative Guidelines Foreword)
2. Users have the privilege to use all of the technology for which they have had training. Anyone using the technology is responsible for the preservation and care of that technology. (Administrative Guidelines Sections I, II, III, IV)
3. Accounts are to be used only by the owner. The sharing of passwords is prohibited. (Administrative Guidelines Sections IV, V)
4. Real names must be used; no aliases are allowed. Additional personal information must not be shared over the Internet. (Administrative Guidelines Sections IV, V)
5. Users experiencing harassment or receiving requests for personal information must report the problem. (Administrative Guidelines Section V)
6. Any violations of the use of the technology should be reported to the teacher in charge. Students violating the Administrative Guidelines may be subject to discipline as outlined in the District Discipline policy, and may also be subject to legal action if appropriate. (Administrative Guidelines Sections II, III IV, V, VI)
7. Copyright laws must be followed. (Administrative Guidelines Sections II, III, VIII)

A copy of the Full Administrative Guidelines can also be found in school offices, media centers, and computer labs.

User has received and read the Technology Use and Safety Administrative Guidelines summary and agrees to the terms.

Student Sign

Date

Parent Sign

Date

Appendix G – JACC Technology Curriculum Standards

Technology Standard / (Aspect)	Bench -mark	Classes to which Benchmark may apply	Modules	Future Plans
USING AND TRANSFERRING				
Content Standard 1: All students will use and transfer technological knowledge and skills for life roles (family member, citizen, worker, consumer, lifelong learner).				
<i>(Family Member)</i>	Identify a need and create or develop a new technology for the home.	Sales and Marketing Education Child Care Housekeeping/Custodial Food Service and Culinary Arts		
	Identify an emerging technology and forecast impacts of that technology on the family.			
<i>(Consumer)</i>	Participate in cooperative research and development projects which study consumer satisfaction of comparable products and services.	Sales and Marketing Education Commercial Art and Media		
<i>(Consumer)</i>	Participate in a real world context which uses a technological system for financial transfers.	Accounting/Finance/Management Support Sales and Marketing Education Commercial Art and Media E-Commerce Technology		
<i>(Citizen)</i>	Identify a social, civic or economic issue and propose a technological solution.	Animal Science/Management Plant Science/Landscape Social Studies		
<i>(Worker)</i>	Evaluate present and future job markets in technology related fields.	Accounting/Finance/Management Support Animal Science/Management Automation Welding Technology Automotive Collision Technology Automotive Service Technology Sales and Marketing Education Child Care Commercial Art and Media Computer Systems Technology	Core Curriculum	

Computer-Aided Drafting
 Construction Trades - Exterior
 Construction Trades - Interior
 Construction Trades - Mechanical
 Construction Trades - On-Site
 Cosmetology
 E-Commerce Technology
 Housekeeping/Custodial
 Food Service and Culinary Arts
 Graphics
 Health Occupations
 Dental Occupations
 Language Arts
 Math
 Photo Journalism
 Plant Science/Landscape
 Precision Machining/CAM Technology
 Pre-Teaching
 Firefighting/EMS
 Law Enforcement
 Science
 Social Studies

(Life Long Learner)

Demonstrate the proper care of technological systems and components.

Accounting/Finance/Management Support
 Animal Science/Management
 Automation Welding Technology
 Automotive Collision Technology
 Automotive Service Technology
 Sales and Marketing Education
 Child Care
 Commercial Art and Media
 Computer Systems Technology
 Computer-Aided Drafting
 Construction Trades - Exterior
 Construction Trades - Interior
 Construction Trades - Mechanical
 Construction Trades - On-Site
 Cosmetology
 E-Commerce Technology
 Housekeeping/Custodial
 Food Service and Culinary Arts
 Graphics
 Health Occupations
 Dental Occupations

Tool Care & Safety

		Language Arts Math Photo Journalism Plant Science/Landscape Precision Machining/CAM Technology Pre-Teaching Firefighting/EMS Law Enforcement Science Social Studies		
USING INFORMATION TECHNOLOGIES				
Content Standard 2: All students will use technologies to input, retrieve, organize, manipulate, evaluate, and communicate information.				
(Communication)	Use technologies to demonstrate skills and a systematic solution to a problem(s) (voice, data, video, graphics, etc).	Accounting/Finance/Management Support Animal Science/Management Sales and Marketing Education Child Care Commercial Art and Media Computer Systems Technology Computer-Aided Drafting E-Commerce Technology Graphics Photo Journalism Plant Science/Landscape Pre-Teaching Firefighting/EMS Law Enforcement		
(Retrieve / Manipulate / Communicate)	Given a scenario, develop multiple options and present the solutions using a variety of technologies.	Accounting/Finance/Management Support Animal Science/Management Automation Welding Technology Automotive Collision Technology Automotive Service Technology Sales and Marketing Education Child Care Commercial Art and Media		

Computer Systems Technology
 Computer-Aided Drafting
 Construction Trades - Exterior
 Construction Trades - Interior
 Construction Trades - Mechanical
 Construction Trades - On-Site
 Cosmetology
 E-Commerce Technology
 Housekeeping/Custodial
 Food Service and Culinary Arts
 Graphics
 Health Occupations
 Dental Occupations
 Photo Journalism
 Plant Science/Landscape
 Precision Machining/CAM Technology
 Pre-Teaching
 Firefighting/EMS
 Law Enforcement

Retrieve, communicate, organize,
 evaluate, and manipulate information
 using a technological system (voice,
 data, video, graphics, etc).

Accounting/Finance/Management Support
 Animal Science/Management
 Sales and Marketing Education
 Child Care
 Commercial Art and Media
 Computer Systems Technology
 Computer-Aided Drafting
 E-Commerce Technology
 Graphics
 Health Occupations
 Dental Occupations
 Photo Journalism
 Plant Science/Landscape
 Precision Machining/CAM Technology
 Pre-Teaching
 Firefighting/EMS
 Law Enforcement

<i>(Evaluate)</i>	Evaluate information received through technologies.	Accounting/Finance/Management Support Animal Science/Management Automation Welding Technology Automotive Collision Technology Automotive Service Technology Sales and Marketing Education Child Care Commercial Art and Media Computer Systems Technology Computer-Aided Drafting Construction Trades - Exterior Construction Trades - Interior Construction Trades - Mechanical Construction Trades - On-Site Cosmetology E-Commerce Technology Housekeeping/Custodial Food Service and Culinary Arts Graphics Health Occupations Dental Occupations Photo Journalism Plant Science/Landscape Precision Machining/CAM Technology Pre-Teaching Firefighting/EMS Law Enforcement		
APPLYING APPROPRIATE TECHNOLOGIES				
Content Standard 3: All students will apply appropriate technologies to critical thinking, creative expression, and decision making skills.				
<i>(Decision - Making)</i>	Apply technological procedures to overcome obstacles when implementing a solution to a problem.	Accounting/Finance/Management Support Animal Science/Management Automation Welding Technology Automotive Collision Technology Automotive Service Technology Sales and Marketing Education Child Care		

Commercial Art and Media
 Computer Systems Technology
 Computer-Aided Drafting
 Construction Trades - Exterior
 Construction Trades - Interior
 Construction Trades - Mechanical
 Construction Trades - On-Site
 Cosmetology
 E-Commerce Technology
 Housekeeping/Custodial
 Food Service and Culinary Arts
 Graphics
 Health Occupations
 Dental Occupations
 Photo Journalism
 Plant Science/Landscape
 Precision Machining/CAM Technology
 Pre-Teaching
 Firefighting/EMS
 Law Enforcement

(Creative Expression)

Represent ideas using a combination of technologies aimed at reaching a diverse audience (voice, data, video, graphics, etc).

Accounting/Finance/Management Support
 Animal Science/Management
 Sales and Marketing Education
 Child Care
 Commercial Art and Media
 Computer Systems Technology
 Computer-Aided Drafting
 Cosmetology
 E-Commerce Technology
 Graphics
 Health Occupations
 Dental Occupations
 Language Arts
 Math
 Photo Journalism
 Plant Science/Landscape
 Precision Machining/CAM Technology
 Pre-Teaching
 Firefighting/EMS
 Law Enforcement
 Science
 Social Studies

(Decision - Making / Critical Thinking)	Evaluate decisions using technology.	Accounting/Finance/Management Support Animal Science/Management Sales and Marketing Education Commercial Art and Media Computer Systems Technology Computer-Aided Drafting E-Commerce Technology Graphics Health Occupations Dental Occupations Photo Journalism Plant Science/Landscape Precision Machining/CAM Technology Pre-Teaching Firefighting/EMS Law Enforcement		
	Use technologies to organize thoughts in a logical process (voice, data, video, graphics, etc).	Accounting/Finance/Management Support Animal Science/Management Sales and Marketing Education Child Care Commercial Art and Media Computer Systems Technology Computer-Aided Drafting Cosmetology E-Commerce Technology Food Service and Culinary Arts Graphics Health Occupations Dental Occupations Photo Journalism Plant Science/Landscape Precision Machining/CAM Technology Pre-Teaching Firefighting/EMS Law Enforcement		
EMPLOYING SYSTEMATIC APPROACH				

<p>Content Standard 4: All students will employ a systematic approach to technological solutions by using resources and processes to create, maintain and improve products, systems, and environments.</p>				
<p>(Systems)</p>	<p>Design and construct technological systems that exhibit continuous improvement.</p>	<p>Accounting/Finance/Management Support Sales and Marketing Education</p>		
<p>(Graphic Technological Solutions)</p>	<p>Creates working drawings from sketches to meet appropriate industrial standards.</p>	<p>Commercial Art and Media Computer-Aided Drafting Construction Trades - Exterior Construction Trades - Interior Construction Trades - Mechanical Construction Trades - On-Site Precision Machining/CAM Technology Law Enforcement</p>		
<p>(Measurement)</p>	<p>Use measurements of dimension and capacity as criteria to produce and evaluate technological solutions to problems.</p>	<p>Animal Science/Management Automation Welding Technology Automotive Collision Technology Automotive Service Technology Child Care Computer-Aided Drafting Construction Trades - Exterior Construction Trades - Interior Construction Trades - Mechanical Construction Trades - On-Site Cosmetology Housekeeping/Custodial Food Service and Culinary Arts Graphics Health Occupations Dental Occupations Photo Journalism Plant Science/Landscape Precision Machining/CAM Technology Pre-Teaching Firefighting/EMS Law Enforcement</p>		

	Transfer measurements within appropriate tolerances for the purposes of producing and evaluating technological solutions to problems.	Accounting/Finance/Management Support Animal Science/Management Automation Welding Technology Automotive Collision Technology Automotive Service Technology Computer-Aided Drafting Construction Trades - Exterior Construction Trades - Interior Construction Trades - Mechanical Construction Trades - On-Site Cosmetology Housekeeping/Custodial Food Service and Culinary Arts Graphics Health Occupations Dental Occupations Photo Journalism Plant Science/Landscape Precision Machining/CAM Technology Pre-Teaching Firefighting/EMS Law Enforcement		
(Processes)	Use industrial tools, materials, equipment, and processes to design and produce products addressing given technological problems.	Automation Welding Technology Automotive Collision Technology Automotive Service Technology Computer-Aided Drafting Construction Trades - Exterior Construction Trades - Interior Construction Trades - Mechanical Construction Trades - On-Site Cosmetology Housekeeping/Custodial Food Service and Culinary Arts Graphics Dental Occupations Photo Journalism Plant Science/Landscape Precision Machining/CAM Technology Firefighting/EMS		

		Law Enforcement		
(Safety)	Investigate, analyze, and assess potential safety hazards, establish guidelines for safe behavior, and adhere to common safety practices while around or participating in the technological solution to a problem.	Accounting/Finance/Management Support Animal Science/Management Automation Welding Technology Automotive Collision Technology Automotive Service Technology Sales and Marketing Education Child Care Commercial Art and Media Computer Systems Technology Computer-Aided Drafting Construction Trades - Exterior Construction Trades - Interior Construction Trades - Mechanical Construction Trades - On-Site Cosmetology E-Commerce Technology Housekeeping/Custodial Food Service and Culinary Arts Graphics Health Occupations Dental Occupations Language Arts Math Photo Journalism Plant Science/Landscape Precision Machining/CAM Technology Pre-Teaching Firefighting/EMS Law Enforcement Science Social Studies	Safety Modules	
(Systematic Approach)	Apply a systematic approach to design solutions to technological problems using investigation, analysis and idea development, proposals, planning, making a prototype of the solution, testing and evaluation of the prototype, and self assessment.	Accounting/Finance/Management Support Animal Science/Management Automation Welding Technology Automotive Collision Technology Automotive Service Technology Sales and Marketing Education Child Care		

		Computer Systems Technology Computer-Aided Drafting Construction Trades - Exterior Construction Trades - Interior Construction Trades - Mechanical Construction Trades - On-Site Cosmetology E-Commerce Technology Housekeeping/Custodial Food Service and Culinary Arts Graphics Health Occupations Dental Occupations Language Arts Math Photo Journalism Plant Science/Landscape Precision Machining/CAM Technology Pre-Teaching Firefighting/EMS Law Enforcement Science		
(Technological Products & Systems)	Adapt solutions to the needs and values of individuals, groups, society, and environment when designing/redesigning problem solutions and creating a quality end product to meet the need.	Sales and Marketing Education Food Service and Culinary Arts		
(Resources)	Analyze resources and processes to choose the best combination to create a technological solution to a problem.	Accounting/Finance/Management Support Animal Science/Management Automation Welding Technology Automotive Collision Technology Automotive Service Technology Sales and Marketing Education Child Care Commercial Art and Media Computer Systems Technology Computer-Aided Drafting Construction Trades - Exterior Construction Trades - Interior Construction Trades - Mechanical Construction Trades - On-Site	Resource selection	

		Cosmetology E-Commerce Technology Housekeeping/Custodial Food Service and Culinary Arts Graphics Health Occupations Dental Occupations Language Arts Math Photo Journalism Plant Science/Landscape Precision Machining/CAM Technology Pre-Teaching Firefighting/EMS Law Enforcement Science Social Studies		
APPLYING STANDARDS				
Content Standard 5: All students will apply ethical and legal standards in planning, using, and evaluating technology.				
<i>(Planning & Evaluating)</i>	Analyze and interpret the impacts of differing ethical and legal standards in the age of global competitiveness.	Sales and Marketing Education Social Studies		
	Explain the associated rights and responsibilities of applying for legal documents (e.g., patents, copyrights).			
<i>(Planning & Using)</i>	Establish an action plan to solve a technology related problem and assess the plan applying ethical and legal principles.	Sales and Marketing Education		
<i>(Using & Evaluating)</i>	Analyze current and emerging issues (e.g., ethical, social, environmental, legal, political, privacy) related to technology.	Sales and Marketing Education Plant Science/Landscape		

	Identify and evaluate solutions for solving the ethical problems associated with using tools, equipment, materials, and processes in a technological problem.			
(Using)	Understand and practice the concept of lifelong learning about technology within an ethical/legal context.			
	Analyze the extent to which organizational purposes and actions are compatible with personal standards in the effective and appropriate use of technology.			
EVALUATING AND FORECASTING				
Content Standard 6: All students will evaluate the societal and environmental impacts of technology and forecast alternative uses and possible consequences to make informed civic, social, and economic decisions.				
(Economic)	Evaluate current uses of technology on one's personal career and occupational goals.	Accounting/Finance/Management Support Animal Science/Management Automation Welding Technology Automotive Collision Technology Automotive Service Technology Sales and Marketing Education Child Care Commercial Art and Media Computer Systems Technology Computer-Aided Drafting Construction Trades - Exterior Construction Trades - Interior Construction Trades - Mechanical Construction Trades - On-Site Cosmetology E-Commerce Technology Housekeeping/Custodial Food Service and Culinary Arts Graphics	Core Curriculum	

		Health Occupations Dental Occupations Language Arts Math Photo Journalism Plant Science/Landscape Precision Machining/CAM Technology Pre-Teaching Firefighting/EMS Law Enforcement Science Social Studies		
	Analyze and forecast the effects of technology on one's personal career and occupational goals.			
(Civic / Social)	Evaluate the direct and indirect effects and impacts of technological developments on national and international issues.	Sales and Marketing Education		
(Social)	Forecast the impact of technology on individuals in our future society, based on present trends.	Sales and Marketing Education		
(Civic / Social / Economic)	Propose guidelines for appropriate and effective use of technology in our society as a whole or in a specific sector of society.			
	Formulate a position and support it about the roles of the government and private sector in creating and influencing policy concerning the use of technology.	Animal Science/Management Plant Science/Landscape		
(Civic / Social)	Frame and support a position confirming that a technological application is safe and appropriate for individuals and society in general.	Animal Science/Management Housekeeping/Custodial Plant Science/Landscape		

(Civic / Social)	Identify and explain how environmental factors contribute to the development of technology and their impacts on society.	Animal Science/Management Sales and Marketing Education Plant Science/Landscape		
(Social)	Assess the historical development of technology regarding the production of tools, equipment, and products in relationship to current societal and environmental needs.	Accounting/Finance/Management Support Animal Science/Management Automation Welding Technology Automotive Collision Technology Automotive Service Technology Sales and Marketing Education Child Care Commercial Art and Media Computer Systems Technology Computer-Aided Drafting Construction Trades - Exterior Construction Trades - Interior Construction Trades - Mechanical Construction Trades - On-Site Cosmetology E-Commerce Technology Housekeeping/Custodial Food Service and Culinary Arts Graphics Health Occupations Dental Occupations Language Arts Math Photo Journalism Plant Science/Landscape Precision Machining/CAM Technology Pre-Teaching Firefighting/EMS Law Enforcement Science Social Studies	Historical perspective of tools and processes	
(Civic / Social / Economic)	Propose, research, and justify the introduction of new technologies.			