

Multnomah Education Service District Technology Plan May 2009

Background and Introduction

Technology has become an omnipresent force in education since the mid-1980s, when computers were first introduced into the learning process. Since that time, the force has become a quest for innovative excellence in the use of instructional and administrative technology tools. This has been evidenced in the national perspective and attention given to technology during the past several years.

In 1996 this quest for innovation was recognized with the introduction of the Federal E-Rate program for funding connectivity for schools and libraries. In addition, federal, state, and other local authorities have authorized additional programs for grants and alternate funding mechanisms for the implementation of technology. All of these programs require a comprehensive technology plan be a part of the school or district long-range vision. Our original Technology Plan was created in 1998, and it (including revisions) has provided us with a guide for continuing to expand technology resources and support systems for our staff and students. It also provides a proven platform to qualify for grants and alternative technology funding.

Since 1998, considerable new technology has been developed to provide staff with technology tools to assist them with easy access to current accurate information and immediate communication. Services such as telephony, e-mail, filtered Internet access, various automated directory services, as well as individual and program level calendaring, Intranet links to helpful frequently accessed business-related sites, networked file sharing, and web-based data access and entry are provided through technology to 99% of the agency staff. MESD provides wide area network services to our 8 component school districts and is also part of the Metro Partnership.

In the classroom environments we continue to support teachers in using existing instructional technologies to further develop with their students the essential technology skills they must have to be successful in the future and to be able to use technology to learn and demonstrate what they know. As one example of this, the MESD Assistive Technology Team continues to provide services to the school districts of Multnomah County as well as to our own agency school teams. Their services include facilitation of team assessment; implementation and development of written protocols and procedures; training with family and school staff; periodic follow-up and referral to other resources as necessary. Their goal is to find just the right match between student, curriculum and technology. E-mail, file storage, and Internet access is also offered to the students at several of our MESD operated schools.

In 2005, the U.S. Department of Education's Office of Educational Technology (OET) produced the National Educational Technology Plan. The plan suggests seven major action steps and recommendations:

1. Strengthen Leadership
2. Consider Innovative Budgeting
3. Improve Teacher Training
4. Support E-Learning and Virtual Schools
5. Encourage Broadband Access
6. Move Toward Digital Content
7. Integrate Data Systems

Also, in 2002, the national Web-based Education Commission released a “policy roadmap” to assist educators and communities to “chart the future of learning in the Internet age.” The MESD joined with communities across the nation to envision educational possibilities in the 21st Century. To further this charge, MESD staff is active in local, regional, national, and inter-national discussions and initiatives to help realize these possibilities. This plan conveys MESD’s evolution in using technology more productively and more inclusively in our very specialized instructional programs for Alternative & Outdoor Education, Special Education, Health and Social Services, etc. ESD schools and school programs are designed to equip students for lifelong learning experiences. As curriculum standards continue to be developed, staff development plans are implemented to meet the requirements of the 21st Century classroom.

Learners will be able to interact successfully in a technological environment to achieve their personal, educational, and workplace goals. They will use technology to access, retrieve, and use information school-wide, community-wide, nationally, and internationally.

As an ESD, we also have responsibility for providing leadership to our component districts in many areas, including the area of technology.

MESD Mission Statement

To support our local school districts and share in providing a quality education for the children and families of our communities.

Technology Mission Statement

MESD will create, maintain and perpetuate a learning environment in which students, teachers, administrators and the community are supported in the use of cost-effective, current and emerging technologies that assist them in fulfilling their roles as citizens, workers, consumers, family, and community members.

Demographics of the District

Ranking second in Oregon in students serviced by ESDs, the District serves more than 85,899 students over 465 square miles and is located 10 miles east of downtown Portland. The following cities are located in Multnomah County: City of Fairview, City of Gresham, a small portion of City of Lake Oswego, Maywood Park, City of Portland (county seat), Troutdale, and Wood Village and the community of Corbett (along the Columbia River). MESD owns or rents 10 individual sites. Including the school programs listed below, MESD staff work in over 160 schools and 25 community sites.

MESD operates eight individual school programs:

Department of Instruction:

- Alpha School
- Helensview School
- Donald E. Long School
- Incarcerated Youth Program

Special Education Programs:

- Multnomah Early Childhood Program (East & West)
- Functional Living Skills
- Arata Creek School
- Pathways Community School

For the school year 2005-06, MESD employed approximately:

| | | |
|-----|---|------------|
| CON | Consultants & Supervisors of Instruction | 30 |
| CS | Clerical/Secretarial | 105 |
| G | Guidance | 2 |
| OAM | Officials, Administrators, Supt, Managers Deputy Supt, Business officials, Directors & Administrators of district wide programs | 45 |
| OCT | Other Classroom Teachers | 96 |
| OPS | Other Professional Staff | 167 |
| PRN | Principals | 3 |
| PSY | Psychologists | 3 |
| SCT | Secondary Classroom Teachers | 10 |
| SER | Service Workers | 17 |
| TA | Teachers Assistants | 199 |
| TEC | Technicians | 53 |
| VPR | Vice Principals | 1 |
| | TOTAL STAFF | <u>714</u> |

Total 714 staff * (*Does not include approximately 400 active temporary staff.)

For the year 2009-10, MESD will employ approximately 700 regular full time and part-time staff

The budget for 2009-10 school year is \$70,186,603.

TECHNOLOGY ADVISORY COMMITTEES

MESD recognizes that a broad spectrum of involvement is required for a technology plan to be effective. This specific plan is aimed at the schools that MESD operates rather than the component school districts that we serve. However, some technology that is implemented for the component school districts is also beneficial for our schools and visa versa, as the following illustrate.

Component District Request used by MESD Departments:

The web-based event calendar product implemented for the school districts we service is also used by MESD for room scheduling and for department-specific events.

MESD Request used by Component Districts:

Technology Services (TS) has added Google Applications for Education as an alternative to the existing Linux/OpenSource e-mail product. The Google Calendar is the agency standard for a common calendaring system. The e-mail portion of Google Applications for Education is a web-based option for all of MESD employees. Since implementation two component districts have begun using Google Applications for Education.

TS licensed anti-virus software to protect agency computers. The contract allows for component districts to also purchase licenses. The hardware and software are supported by TS.

TS has begun replacing an aging unsupported PBX based phone system with a Voice over Internet Protocol (VoIP) phone system. Staff are consulting and supporting component districts and other ESDs in their planned VoIP implementations.

Therefore, it is the intent to involve not only MESD departments, but also to include representatives from all of our learning environments (component districts and beyond), community members, and local businesses in the planning process.

The various advisory committees are listed below:

Special Education Services:

Special Education Directors: This component district advisory committee meets monthly during the school year to guide program services in the area of special education.

Early Childhood Council: This is an interagency council that advises MESD on special education services for children birth to five.

Department of Instructional Services:

Curriculum & Instruction Advisory Committee: This component district advisory committee meets monthly during the school year to guide program services in the areas of curriculum, instruction, assessment, staff development and instructional technology.

Alpha School Advisory Committee: This component district advisory committee meets monthly during the school year. Advisory members provide input and advise Alpha on how to best meet the needs of their districts and their students within Alpha's school-to-work model as well as share information within their districts regarding Alpha.

Helensview Advisory Committee: This component district advisory committee meets monthly during the school year to help our representatives become aware of services for students in their district, for advisory members to provide recommendations and input as needed, and to inform their colleagues and superintendent of the services the MESD provides for their districts.

Department of Health and Social Services:

Health and Social Services Advisory Committee: This component district advisory committee meets monthly during the school year to guide program services in the area of health and safety.

Department of Technology Services:

MESD Board Facilities and Technology Committee: This Board sub-committee meets approximately quarterly with the Director of Technology Services, the Facilities Coordinator and the Superintendent. Through these meetings, the subcommittee is kept current regarding new technology plans and developing partnerships based upon input from the following user advisory committees. They also guide technology policy development for the MESD Board and staff.

Technology Services Advisory Committee: This component district advisory committee meets 3 times a year to guide technology advancements and services provided. Under this committee three user committees focus on specific application areas: Student, Business, and Networking.

The eSIS User Group meets monthly to discuss topics specific to the eSIS student information system, including module implementation strategies, enhancement updates, ODE changes/requirements, collaboration issues with other eSIS districts, statewide. The committee makes recommendations to the TS Advisory Committee.

The IFAS Leadership Team meets monthly to discuss topics specific to Financial and Human Resources, including accounting, payroll, human resource activities, new IFAS features, and distribution of look-up and other functionality to the school buildings and sharing experiences and documentation. The committee makes recommendations to the TS Advisory Committee.

The Business Systems User Group meets six times a year to discuss end user problems, needs and future enhancements to the system.

The Network Services Advisory Committee meets 8 times during the school year to discuss topics specific to Wide Area Network applications and strategies, including telecommunications delivery, subsidies from E-Rate, etc. Additionally, global discussions occur related to the specific applications committee members use as they relate to the services the Technical Coordinators provide to their own districts. The committee makes recommendations to the TS Advisory Committee.

While the advisory groups provide much of the guidance relating to technology and technology needs, MESD also finds that valuable feedback is provided through regular staff meetings and building level contacts. This feedback is funneled back into the advisory structure by staff and supervisors.

COMMUNITY ALLIANCES – PARTNERSHIPS

Many of the MESD department/programs have created a number of working alliances. Some are contractual in nature and some are simply cooperative in nature, where each benefits from the other. Appendix A includes a spreadsheet of the varying partnerships.

Department of Instructional Services:

The Department of Instructional Services programs participate with numerous businesses in the local and regional area. These partnerships are established primarily to provide “hands-on” career experiences for students. However, as technology becomes an ever-increasing component of the job environment, these partnerships will establish pathways to developing new programs based on employer need. In this manner, technology use and proficiency will become part of the practical experience of the alternative student’s educational experience.

Additionally, we will continue to capitalize on the projects currently developed and under development in cooperation with regional partners. An example of this effort is as follows:

Multnomah County – Interagency agreements to gather, share and analyze data regarding student attendance in all districts served; support services to students, families and school drop outs; and school-to-work and post-secondary experiences for youth within alternative education programs.

Department of Instructional Services

- Discovery Education – we have partnered with our component districts to use on-demand video streaming services in district schools.
- Rubicon International – we have developed a partnership with Rubicon to provide our districts with access to an on-line curriculum-mapping tool (Atlas).
- MESD has developed a variety of list serves that provide venues for sharing information and resources either locally or statewide. Questions are posted and answered, research strategies are exchanged, materials are shared, and suggestions and possible future ventures are discussed. This electronic cooperation benefits the county schools and their instructional staff that we serve.
- Plato – makes available to our ESD schools on-line curriculum augmentation courses.
- Multnomah County Department of Community Justice – partnership shares hardware and software to support student’s further educational attainment.
- Read 180 – makes available to our ESD schools reading intervention program.

Health and Social Services

The school health program maintains health data on student chronic health issues and links to external databases with community health agencies to facilitate access to health care for students and their families. All health information is treated as privileged health information and is held confidential under the laws of the State of Oregon and the United States of America.

- Department of Human Services – Health Services – Interagency agreements to provide data for computing the proportion of students with asthma and diabetes and to describe the impact of asthma and diabetes on utilization of school health services.
- Department of Human Services – Provides reimbursement to school districts under the federal provisions of the Individual with Disabilities Education Act for health services provided in the special educational setting. OMAP – Data exchange for eligibility and payment for service provided under the School Based Health Services Oregon state plan for the component school districts of Multnomah Education Service District and by contract with districts through out Oregon.
- Multnomah County Health Department, Medicaid Outreach – Share data information for participation in the Oregon Health Plan.

- Multnomah County Health Department, Immunization Monitoring and Exclusion Process - ALERT DATA Clearing – Data transfer of student immunization information
- Kaiser Permanente – CHIAP database – Identify potentially eligible children for Oregon Health Plan or Kaiser Health Plan and then assist in the enrollment process.
- Clackamas ESD, Molalla School District, Estacada School District and Gladstone School District Provide immunization data along with data related to Medicaid Reimbursement.

Technology Services

One example of an alliance is the coalition formed and led by the MESD/TS department to interconnect the INET fiber network that has been built in the outskirts of Multnomah County by the Mt. Hood Cable Regulatory Commission with City of Portland's IRNE inner city fiber backbone network. The partners are the City of Portland, City of Gresham, Portland Public Schools, Multnomah County, and MESD. All schools and district offices were upgraded from a 1.54 Mbps T1 to 100 Mbps or faster IRNE/INET connection. This dramatic increase in network capacity has allowed our schools to begin integrating distance education and video streaming into their classrooms.

Another alliance which began in the Fall of 2001, when MESD/TS and Portland Public Schools embarked upon a joint project to implement Administrative Assistants Ltd.'s eSIS administrative student applications software package. eSIS offers a district/web solution with access for students, parents, administrators, teachers, and professional staff involved with the management of student records and the instructional process. In late 2004, Clackamas ESD joined the project. CESD, MESD, and Portland Public Schools share the same instance of the eSIS database. This alliance was recently revised to form the SISNet group to support the day-to-day back-end functions of the eSIS instance. SISNet includes staff from both CESD and MESD housed together at MESD.

MESD Technology Services also began working with Clackamas Education Service District, Northwest Regional Education Service District, and Portland Public Schools in the Metro Partnership. Through this relationship, our agencies have aggregated bandwidth to the Internet at substantial savings to school districts. A variety of joint projects have been completed that have improved technology among the four agencies including Inter-active Video Conferencing.

LIFELONG LEARNING

As evidenced in the program specifics, MESD schools are designed to equip students for lifelong learning experiences. Our schools must prepare students to be lifelong learners who are responsible for their own learning, skilled in accessing and processing information, confident in using technological tools, able to solve complex problems alone or collaboratively, capable of being creative and innovative, and able to communicate locally, nationally, and worldwide.

It is the intrinsic goal of MESD to facilitate an atmosphere of lifelong learning, as stated in the Technology Mission Statement:

MESD will create, maintain and perpetuate a learning environment in which students, teachers, administrators, and the community are supported in the use of cost-effective, current and emerging technologies that assist them in fulfilling their roles as workers, citizens, consumers, family, and community members.

SPECIAL PLANNING AND IMPLEMENTATION CONSIDERATIONS

Because of the unique nature of the ESD schools within the State of Oregon, there are issues that require special attention and implementation methodology. MESD operates the only broad-based ESD sponsored alternative education program in the state. MESD also operates individual schools and special education programs to meet a variety of needs, ranging from secure lock-down environments for emotionally handicapped students to teen parenting to functional living skills to hospitalized students. These programs all require specific planning and attention to unique details.

Some of those issues are as follows

- Security: communication and equipment
- Program diversity
- Short term educational experiences
- Broad-based age spectrum per class
- Non-MESD owned facilities (infrastructure differences in the buildings)
- Varied learning environments
- Funding structure

To resolve these and other issues, MESD has established performance and quality standards for equipment, as well as software standards. (See Appendices B and C)

GOALS AND STRATEGIES

Criteria Group 1

Provide adequate staff development and training for using technology in the learning environment. Assure that curriculum goals will drive future technology implementation goals.

The Director of Instructional Services continues to work with individual programs and others in the district to determine how best to incorporate established guidelines (see Appendix D, Instructional Technology Curriculum guide) for using technology in the classroom. Each program will be addressed in accordance with the individual program needs and requirements.

These revised guidelines will include student expectations as they relate to CIM/CAM, required tools (hardware/software), and level of staff competency to facilitate the student with the end product goal. Again, because of the unique nature of MESD programs and schools, each area will be assessed and a program designed to meet the needs of that specific curriculum. The following programs will be involved in this review and implementation process:

Alpha School: alternative school for students unsuccessful in other educational settings.

Goals & Beliefs:

Students will be able to get along with others
Students will be job ready and/or trained
Students will be able to function autonomously as adults
Students will achieve academic success

Arata Creek School: to serve a student who's social, behavioral, and academic needs make it difficult for them to be successful in a regular setting.

Goals & Beliefs:

Committed to helping all students acquire the social, behavioral, and academic skills necessary to become productive citizens now and in the future
All students have the right to learn these skills in a safe, caring, and respectful environment

Donald E. Long: varied student population within the Multnomah County Juvenile Justice complex.

Incarcerated Youth Programs: Educational program for youth housed within adult correctional facilities:

Goals & Beliefs:

All students can learn
All students deserve respect, and can be contributing members of society
Positive school experiences will foster a change of attitude

Helensview School: flexible and individual instruction for teen parents, youth who have dropped out of school, youth returning to the community from state custody, and students who have been unsuccessful in other educational settings.

Goals & Beliefs:

Students will develop positive parenting skills
Students will complete a secondary education
Students will become economically self-sufficient
Students will plan for lifelong learning

Early Childhood/Early Intervention: focuses on working in partnership with parents to enhance their child's development (birth to age 5) across 5 developmental areas.

Goals & Beliefs:

Support social and emotional development-the ability to form and sustain relationships
Foster language development
Encourage physical well-being and motor development
Provide opportunities for cognition and general knowledge development

Support a child's learning needs in a variety of ways

Functional Living Skills: the focus of instruction is on the development of functional life skills, life-long transitions, and the development of independent habits.

Goals & Beliefs:

All children can learn and develop in the following areas: Independent Living, Communication and Social Skills, Functional Academic Skills, Recreation and Leisure Skills, and Vocational Skills

Pathways Community School (PCS): post-secondary Life Skills training program.

Goals & Beliefs:

Provide opportunities to continue to increase student independent living and vocational skills.

Action Plan

| Activity | Timeline | Budget | Responsible Party | Evaluation |
|--|--------------------------------|------------------------------|--|---|
| 1. Agency staff will review and update program curriculum goals for students on an annual basis. | Spring and summer of each year | Varies by program and school | Program supervisors, school principals, and teaching staff | Feedback and suggested edits are provided to the Director |

PROFESSIONAL DEVELOPMENT

Criteria Group 2

The Technology Services Department provides and facilitates various training methods, including one-on-one tutoring; classroom training in the MESD Training Rooms; coordinates classes taught by New Horizon staff; provides topic specific videos produced in-house; and offers seminars, and workshops specific to department requirements.

As a result of a 2008 survey of MESD Supervisors regarding training needs of staff, a variety of creative training methods were identified. The survey results were translated into technology needs. The training requested was matched to job requirements and a final list of needed trainings was developed. Technology Services will continue to work with each department to develop a training plan. Careful consideration will be given to ensure that the training opportunities meet the needs and ability levels of staff involved in the training. Whenever possible, training(s) will be provided by a peer and on equipment used by the people being trained. For example, trainings will occur on Mac computers for those staff members assigned to a Mac computer. Informal and formal evaluation procedures will be followed to determine effectiveness and level of impact of the professional development opportunities provided by the agency.

The training sessions in 06-09 were categorized into the following general training options:

- TS offered classes – desktop/laptop essentials, attaching/using projectors, email, Financial & Student administrative products, Internet/Intranet basics, etc.
- Health and Social Services Department – Specific foundation training for School Nurse's use of web and network based applications.
- Alternative Education – Department specific training/curriculum-based software for classroom.
- Google – Training on using the full complement of Google Applications for Education including e-mail calendaring, Google Sites, and Google Docs.
- Click, Drag, and Drill – Use of web-based reporting tool for financial management system.
- New Horizon Classes – Continue to encourage all staff to sign up for formal classes offered at MESD, taught by New Horizon staff, i.e., Word, Excel, PowerPoint, Access, Macromedia-Dreamweaver, etc.

Training needs are also determined through direct requests to Technology Services from employees, requests from department directors, and annual surveys of agency supervisors.

Action Plan

| Activity | Timeline | Budget | Responsible Party | Evaluation | TS |
|---|-------------------------------------|-------------------------------|---|---|--|
| 1. Implement Technology Survey of staff needs | Fall 2009 | | Director of TS | Supervisor Survey | Collect, record, extrapolate training needs |
| 2. Review and revise as needed, agency's comprehensive training program | Fall of 2009 | | Cabinet | Revised Staff development plan | Assist in establishing a training program |
| 3. Develop program/school professional development plan | Winter of 2010 | Varies by program and school | Cabinet | Completed Staff development plan | |
| 4. Implement staff development plan | Winter 2010 Continue spring 2010 | Varies by program and school | Cabinet/program supervisors and school principals | Review outcomes of past trainings May 2006 | Provide available resources |
| 5. New Horizon classes (Word, Excel, PowerPoint, etc.) | 2009-10 2010-11 2011-12 | \$6,000 \$6,000 \$6,000 | TS | Over the years, staff has become experienced with admin products, and budget necessary to provide training is reducing. | Facilitate staff needs with computer lab availability and budget availability. |

TECHNOLOGY ASSESSMENT

Criteria Group 3

Provide adequate technology and support for classroom and administrative users.

Between 2006 and 2009, we have spent approximately \$125,000 annually to bring computer access to our employees and to all MESD classrooms. All regular employees have access to e-mail and to the Intranet in order to receive agency communications. These communications are pervasive in our environment and it is imperative that all staff have access to the material.

Approximately 93% of our staff have regular access to a computer in support of their jobs. (The exceptions are some facility management staff and some health assistants). For these 7%, we have set up shared workstations, and procedures for Department Secretaries to print important information and to place it in their staff's regular mailboxes, or to provide a regular department newsletter that will include the agency communications.

Administrative Applications

MESD has not funded a "Web Master" position for the agency but instead has distributed the web page development to the Departments. The MESD communications department recently upgraded and standardized the agency website with a common set of templates that are required for the primary agency web pages and department pages. The individual departments manage their web-based material. A peer support network is in place for the ongoing support and training. With the deployment of the IFAS Dashboard and an extensive set of fiscal and human resource reports we will provide more web-based reports and fewer printed/distributed reports.

The Intranet is in place for all staff to use to access agency information, such as messages from our Superintendent, access to various calendars (such as calendars related to their own programs, or agency meeting room schedules), minutes from the various advisory committees, various Human Resource documents, technology related tutorials, Internet research sites and tutorials, directories, maps, important links to Oregon State sites, an on-line status board for each department, mileage chart, policies for building closure, procedures for working after hours, agency employment opportunities, various training materials, etc. The use of web-based Human Resource data entry programs (timesheets, leave requests, personal calendars, mileage requests, etc.) continues to evolve with a renewed interest in utilizing the full suite of IFAS products. In the coming years IFAS will give us greater ability to automate repetitive and paper intensive tasks. MESD has adopted an IFAS Strategic Plan to lay out the road map to fully utilizing the resource. The IFAS Strategic Plan is included as Appendix K.

All departments have identified staff to update and maintain their staff directory information, which is part of the Lightweight Directory Access Protocol (LDAP) database and is interrelated with the agency phone system. The LDAP system is also being used by Corbett, David Douglas, Parkrose, and Riverdale.

Various subsystems of the Student Information System (eSIS) administrative application are used by MESD schools/programs. Most common modules used are: Immunizations, Attendance, and State Reports.–

TS coordinates the research and development of new systems for administrative use.

Classroom Applications

TS remains a part of a coalition with the City of Portland, Multnomah County, the City of Gresham, and Portland Public Schools to interconnect the last-mile fiber (INET) that has been extended to all of our agency schools and to many of our component district schools. All schools within Multnomah County have at least 100 megabit connections. Two school sites that reside in Clackamas County where the INET is not available are connected with 100 megabit connection through an alternative carrier.

The benefits of the faster transmission speed will be realized in both the classroom and office environments. The eSIS Student System is a web-based system and is utilized by hundreds of administrators and thousands of teachers in Multnomah County. The fiber speeds greatly enhances their critical access to this system.

This robust telecommunication network will allow MESD to provide phone service in classrooms previously unserved. Some component school districts are participating with this project. We hope to roll this project out to more schools in the future.

Districts are charged fully for telecommunication expenses through the resolution process. MESD completes the E-Rate application on behalf of districts for shared circuits and for IRNE/INET Connections. All e-Rate funds are reimbursed by MESD to districts.

Assessment tools will also be developed to determine the effectiveness of the plan, individual tools, and applications. This assessment will include baseline information, status reports, and recommendations for further development.

Special Education Services

The ECData software program (developed and maintained by the University of Oregon) is used by staff of the Functional Living Skills, Multnomah Early Childhood, Related Services/Speech and Social Emotional Skills Programs to track, write, and print students' Individual Family Plans.

Department of Health and Social Services

Chronic - aka Big 5 "Health Factor" letters: Asthma, Seizures, Diabetes, Allergy, other

- Tracking is monitored using eSIS.
- Parent marks on the registration form if the child has one of the conditions.
- Data is entered in the "other Health Factors" screen. Enter the description and date began which the letters are generated from.
- Life Threatening? is used to indicate a very serious medical condition. The question is on the new registration form. If the parent marks the box, then the school secretary should enter it on eSIS.
- A letter is generated to the parent. These are printed once upon enrollment or at initial identification.

Explore options to decrease fiscal impact to districts.

Medicaid Administrative Claiming (MAC)

- MESD's Technology Services department and the Health and Social Services department combine to run the Medicaid Administrative program. (MAC).
- The MAC program performs time-study surveys for county health departments and school districts to document reimbursable Medicaid activities performed by staff.
- Time studies are performed using a web-based system developed and maintained by MESD. The MAC system generates claims which are submitted to Oregon's DHS for re-imbusement.

- MESD's MAC program performs time studies for its own district, and contracts with other school districts and county health departments.
- Since the program started in 2002, over \$118,000,000 in re-imburement claims have been processed through MESD's MAC system.
- As of January 2009 MESD has performed MAC services for 149 school districts and 29 county health departments.
- Each year over 50,000 MAC time study surveys are processed through MESD web based survey tool.

Continue to modify MESD's MAC system to meet state program requirement and federal program requirements.

Expand our customer base (school districts and county health departments) both inside and outside of Oregon.

Enhance MAC management tools to allow for more useful and easier to use data analysis (across reporting periods).

Technology Policies

Internet Use Guidelines

MESD's Electronic Communications Guidelines (for student and staff) places an emphasis on personal responsibility and ethical behavior. The policies contain usage guidelines and consequences related to misuse of the Internet and other electronic provisions in place. These policies are consistent with the Children's Internet Protection Act (CIPA) enacted in April 2001. We have an automated, protective filtering system in place, which is also compliant with CIPA.

Board Policies

MESD continues to maintain and update the Board Policies including technology and electronic communications policies based upon OSBA guidelines.

Service Level Commitments

TS has Service Level Commitments (SLCs) for its three major on-line administrative services: Network, Student, and Business. These SLCs were developed with input from all component districts, and will continue to be maintained. (See Appendices G, H, and I)

Technical Support

The TS Department houses specialists in a variety of areas for computer systems support, including but not limited to the following:

- Desktop/laptop support (loading software, connecting to the network for printing and backup).
- Basic computer training (caring for, how to use).
- Basic agency standard software support and installation.
- Basic Internet access support and training (including familiarity with the Electronic Communications policies and related ethics).
- New Horizons Learning Center training
- Virus protection
- Intranet applications i.e., e-mail, calendaring, etc. (refer to Appendix G SLC/Network).
- Application advisement/development for proposed new networked applications
- Network administration
- VoIP phone system training and management
- Student System AAL's - eSIS for tracking/maintaining student associated records such as demographics, attendance, report cards, health records, immunization, class scheduling, etc.

- Financial System (SunGard Public Sector's IFAS) for accounting, payroll, HR, and various other integrated financial systems. Various subsystems are used by MESD programs.
- Web page development – Mentoring, peer support, and training.
- On-line phone directory – Mentoring and training.

Network Applications

The network is available 24 hours/day, 7 days a week. When maintenance work needs to be done and the network will not be available, all agency staff are notified 24 hours in advance. These interruptions are held to an absolute minimum and are targeted for evenings or weekends and/or holiday breaks. The network described here includes: Internet access, Internet filtering, dial-up, e-mail, file sharing, main system applications such as, Business and Network applications. Internet access for web reporting is available from the Business/Human Resource System, and new eSIS is completely web-based.

OpenSource products are used to provide e-mail, file sharing, Internet filtering, firewall, and various other network services including phone services through a Voice over Internet Protocol (VoIP) Private Branch Exchange (PBX). These systems were very low-cost to set up and require virtually no annual software maintenance contracts.

The majority of the program-specific servers are connected to the agency network; therefore, nightly backups and weekly offsite storage of the backup media occurs automatically.

Network Infrastructure

The technology infrastructure includes several components of voice, video, and data technologies, along with a cabling plan. All technology infrastructural purchasing is coordinated through TS.

Voice

T1 circuits have been replaced at MESD IRNE/INET remote sites. These circuits will be utilized for VoIP for voice connection. A VoIP implementation will cut support costs significantly while increasing available features on the phone system. We expect to keep the PRI T1 circuits for incoming and outgoing calls.

Data

All of our constituent school district schools are connected to the IRNE/INET fiber network.

Video

The district currently uses standalone applications of video technology including televisions, two-way video conferencing, VCR's, and DVD players. The Metro Partnership MESD belongs to is jointly operating an IVC gateway to save costs.

With the existing fiber to our building from a countywide fiber network, we are able to implement more interactive video conferencing and video-streaming to our administrative offices and to our school buildings.

All component districts utilize a joint contract for Discovery Education streaming video. MESD manages the contract for districts to purchase off of.

Cabling Infrastructure

Electrical

Most areas have been equipped with upgraded electrical capacity for technology. However, this remains a problem in buildings that MESD does not own.

Wire

A similar scenario exists for the network cabling and wire. Most buildings have been networked using Category 5 for data applications. Specific numbers of outlets are installed according to the program needs.

Category 6 is the standard for new wiring projects using the EIA/TIA guidelines for installation.

Video and Media Support

Currently technical support for videoconferencing and video projection is provided as a service to agency programs.

Workstations

Exceedingly old PC workstations have been redeployed as terminals using the Linux Terminal Server Project (LTSP). This allows workstations that are too old to be deployed as stand alone workstations to be utilized for State assessment testing, and web, email, word processing kiosks. Several thousand "terminals" have been deployed throughout Multnomah County schools.

Hardware & Software Standards

Hardware and software standards have been established with consideration of current technology and the ability of MESD to support and maintain these systems. Standards are reviewed quarterly to ensure appropriateness. All purchases, whether hardware or software, are coordinated through TS. Appendices B and C include these standards.

Action Plan

| Activity | Timeline | Budget | Responsible Party | Evaluation |
|---|---------------------------|--------------------------------------|--|---|
| 1. TS Advisory Committee | 2009-11 (Twice a year) | | TS Director | Periodic status review |
| 2. Update Internet Use Policy | 2009-10 | Agency budget | TS Director, | Cabinet |
| 3. Update Board Policies | 2009-10 | Agency budget | TS, MESD Counsel, OSBA | Board approval |
| 4. IRNE/INET Countywide fiber network renegotiation of contract | 2009-10 | | TS, City of Portland, Multnomah County, PPS, City of Gresham, MHCRC | New contract |
| 5. VoIP implementation | ongoing | Agency budget - possible grant | TS, Facilities | New phone system in place and Verizon contracts cancelled |
| 6. Department Hardware replacement plans | 2009-10 | Department budgets | TS and departments | Develop ongoing detailed plan |
| 7. Medicaid Administrative Claiming | 2009-11 | Medicaid reimb. | HSS/TS | Expand functionality, training, and customer base within and outside Oregon |

BUDGET RESOURCES

Criteria Group 4

COSTS/BUDGETING

MESD operates the technology programs for the internal education programs drawing from several different sources and/or funds including Instructional Support, Health and Social Services, and Technology Services. As is the case with most Oregon districts, budgets are shrinking and demands are increasing as illustrated below:

| Object Code | Object Description | 06-07 Actuals | 07-08 Actuals | 08-09 Budgeted | 09-10 Budgeted |
|--------------------|------------------------------------|--------------------------|--------------------------|---------------------------|---------------------------|
| 0359 | Communications | \$621,803 | \$728,196 | \$642,767 | \$657,784 |
| 0470 | Software | \$172,585 | \$113,120 | \$107,702 | \$139,877 |
| 0480 | Technology (hardware < \$5,000) | \$510,464 | \$395,844 | \$347,657 | \$299,524 |
| 0550 | Technology (hardware > \$5,000) | \$36,215 | \$143,626 | \$90,000 | \$186,804 |
| Total | | \$1,341,067 | \$1,380,786 | \$1,188,126 | \$1,283,989 |

These budgets represent items approved in the 2009-10 Approved Budget for MESD. It does not account for additional funds, services, or equipment that may be acquired via grants, gifts, and other means.

The primary expenditure for the 08-09 School Year was replacing the air conditioning units in the computer room and VoIP phone pilot project.

Recognizing that computer equipment has a limited life span, each program is in the process of developing a replacement cycle of 3 or 4 years. Since some equipment will have remaining usefulness a waterfall process is included which will allow machines to be repurposed for appropriate needs. Some systems are reused as Linux labs because of the lower hardware requirements. Technology Services is implementing a number of hardware and software auditing tools to better track the agency's resources and their ages.

ONGOING EVALUATION

Criteria Group 5

MESD is creating and fostering a progressive approach to instructional technology, working collaboratively with its component school districts to identify needs, conduct research and development, and implement cost effective technologies.

Through this partnership with our county schools we are able to stay current with the latest developments in instructional technology applications. We are now working on getting this information to teachers and staff members within our agency.

Each school program within the Department of Instruction creates an annual School Improvement Plan. The school principal involves the entire staff in the process of identifying annual goals. These goals are shared with each program Advisory Committee and community/business partners as appropriate. Technology goals are included within the School Improvement Plan each year. In the spring of each school year, the Plan is reviewed and evaluated by each school staff. Progress is noted and goals for the following year are crafted.

Action Plan

| Activity | Timeline | Budget | Responsible Party | Evaluation |
|--|----------|---------|-------------------|--|
| Hold at least two information gathering meetings during the school year for representatives from MESD schools/educational programs | Ongoing | No Cost | Director TS | Survey will be administered to meeting attendees to ascertain the effectiveness and value of the informational sessions. |

**MESD Technology Plan
May 2009**

APPENDICES

APPENDIX A

| Cooperation, Alliances, and Partnerships for 2008-2009: | Admin. | DOIS | SPED | Comm. | HSS | Tech Serv. |
|--|---------------|-------------|-------------|--------------|------------|-------------------|
| 4H | | x | | | | |
| Administrative Assistance Ltd. (AAL) | | | | | | x |
| Albertina Kerr Centers | | | | | x | |
| American Diabetes Association | | | | | x | |
| American Lung Association of Oregon | | | | | x | |
| Apple Corporation | | | | | | x |
| Artz Center | | | x | | | |
| Associated Gen. Contractors of America – OR-Columbia Chapter | | x | | | | |
| Association of Education Service Agencies (AESA) | x | | | | | |
| AESA Executive Council | x | | | | | |
| AT&T | | | | | | x |
| B-FIT (Building Futures in Industry and Trades, PCC) | | x | | | | |
| Better People | | x | | | | |
| Boy Scouts of America | | x | | | | x |
| British Education Communications and Technology Agency | | | | | | x |
| Care Oregon | | | | | x | |
| Cascade College | | | | x | | |
| Centennial Learning Center | | x | | | | |
| Child Health Insurance Program | | | | | x | |
| Children’s Land Trust Board | x | | | | | |
| City Club of Portland | | | | x | | |
| City of Gresham | | x | | x | | |
| City of Portland | | x | | | | x |
| City of Troutdale | | x | | | | |
| Clackamas County Health Department | | | | | x | |
| Classroom Law Project | x | x | | | | |
| Clear Wire Communications | | | | | x | x |
| Columbia Corridor Association | x | | | | | |
| Columbia Regional Programs | | | x | | | |
| Communicable Disease Center | | | | | x | |
| Communities of Color Partnership | | x | | | | |
| Compassionate Rockwood | | | | | x | |
| Concordia University | | | | x | | |
| Confederation of School Administrators (COSA) | x | x | | | | |
| Cooperative Purchasing Program | x | | | | | |
| Cosmos Technology | | | | | | x |
| Council of Education Facilities Planners (CEFPI) | x | | | | | |

| Cooperation, Alliances, and Partnerships for 2008-2009: | Admin. | DOIS | SPED | Comm. | HSS | Tech Serv. |
|--|---------------|-------------|-------------|--------------|------------|-------------------|
| Data Center Managers from around Oregon | | | | | | X |
| Dell | | | | | | X |
| Department of Human Services | | X | | | X | X |
| Office of Medical Assistance Programs (OMAP) | | | | | X | |
| Medicaid | | | | | X | X |
| Division of Corrections | | X | X | | | |
| Doernbecher Children's Hospital | | | X | | | |
| Early Childhood Care and Education Council | | | X | | | |
| Early Foundations | | | | X | | |
| Early Head Start Program | | | X | X | | |
| ESDs | | X | X | | X | X |
| Clackamas ESD | X | X | X | | X | X |
| Columbia Gorge ESD | X | X | X | | X | X |
| High Desert ESD | | | X | | X | |
| Lane ESD | | | X | | X | X |
| Linn-Benton-Lincoln ESD | | X | X | | | X |
| North Central ESD | | | X | | | X |
| Northwest Regional ESD | X | X | X | | | X |
| South Coast ESD | | | X | | | X |
| Umatilla Morrow ESD | | | X | | | X |
| Union-Baker ESD | | | X | | X | |
| Willamette ESD | | X | X | | | X |
| Families and Communities together | | | X | | | |
| Family Health Insurance Program | | | | | X | |
| Family Works | | X | | | | |
| FBI | | | | | | X |
| Friends of Outdoor School | | X | | X | | |
| Friends of Trees | | X | | | | |
| Friends of Tyron Creek | | X | | | | |
| Glendoveer Elderplace | | X | | | | |
| Google | | | | | | X |
| Gresham Community | | X | X | X | X | |
| Berry Botanical Gardens | | X | | | | |
| Chamber of Commerce | | X | | | | |
| City Council | | X | | | | |
| Community Service Board (est. this year) | | X | | | | |
| Downtown Business Association | | X | | | | |
| East County Caring Community | | X | X | | | |
| East County One Stop | | X | | | | |

| Cooperation, Alliances, and Partnerships for 2008-2009: | Admin. | DOIS | SPED | Comm. | HSS | Tech Serv. |
|--|---------------|-------------|-------------|--------------|------------|-------------------|
| Friends of Fairview Creek | | | x | | | |
| Gresham City Parks and Recreation | | x | | | | |
| Police Activities League | | x | | | | |
| Riparian Guardians Greenhouse Project | | x | | | | |
| SOLV | | x | | | | |
| YMCA Advisory Board (Student representative) | | x | | | | |
| YMCA Basketball League | | x | | | | |
| Youth Advisory Committee (Student representative) | | x | | | | |
| Youth Development Council | | x | | | | |
| Youth Involvement Network | | x | | x | | |
| Head Start | | x | x | | x | |
| Albina Head Start | | | x | | | |
| Community Dev. Inst. Head Start | | | x | | | |
| Early Head Start | | | x | | | |
| Even Start | | | x | | | |
| Health Advisory Committee | | | | | x | |
| Migrant Head Start | | | x | | | |
| Mt. Hood Community College Head Start | | x | x | | | |
| Portland Public Schools Head Start | | | x | | | |
| Neighborhood House Head Start | | | x | | | |
| Healthy Kids Learn Better Coalition | | | | | x | |
| Healthy Start | | | x | | | |
| Hewlett Packard | | | | | | x |
| Immigrant and Refugee Community Organization | | x | x | | x | |
| Immunization Task Force | | | | | x | |
| Insights Teen Parent Program | | x | | | | |
| Intel Corporation | | | | | x | x |
| Kaiser Permanente | | | | | x | |
| KEIP/Kerr | | | x | | | |
| Leaders Roundtable | x | x | x | | x | x |
| Legacy Health Systems | | | x | | x | |
| Lewis and Clark College | | | | x | | |
| Linfield College | | | | x | | |
| LISTOS | | x | | | | |
| Loaves & Fishes – Lents and Fook Lok | | x | | | | |
| Local Public Safety Coordinating Council | x | | | | | |
| McCoy Academy | | x | | | | |
| Medicaid | | x | x | | x | |
| Metro Superintendents | x | | | | | |

| Cooperation, Alliances, and Partnerships for 2008-2009: | Admin. | DOIS | SPED | Comm. | HSS | Tech Serv. |
|--|---------------|-------------|-------------|--------------|------------|-------------------|
| Molalla School District | | | | | X | |
| Morrison Center | | X | X | | | |
| A&D | | X | X | | | |
| Mt. Hood Cable Regulatory Commission | | | | | | X |
| Mt. Hood Community College | | X | X | X | X | |
| Continuing Education | | | X | | | |
| Head Start | | | X | X | X | |
| Migrant Preschool | | X | X | | | |
| Regional Education Consortium | | X | | | | |
| Multnomah Co. Commission on Children, Families & Community | | X | X | | | |
| Multnomah County | X | X | X | X | X | X |
| Adult & Juvenile Community Justice | | X | X | | X | |
| Counselors | | X | X | | | |
| Board of Commissioners | | X | | | | |
| Caring Communities | | X | | | X | |
| Child Abuse – MDT | | | | | X | |
| Child Welfare | | | X | | | |
| Childcare Resource and Referral | | | | | | |
| Corrections Health | | X | | | | |
| County Behavioral Health | | | X | | X | |
| Developmental Disabilities | | X | X | | | |
| Drug and Alcohol Services | | X | | | | |
| Employee Services Division | | X | | | | |
| Health Department | | | X | X | X | X |
| Health Services Taskforce | | | | | X | |
| Immunization Program | | | | | X | |
| Information Technology Department | | | | | | X |
| Inverness Jail | | X | | | | |
| Justice Center | | X | | | | |
| Library | | X | X | | | |
| Measuring Outcomes in Children w/ Special Health Care Needs | | | | | X | |
| Mental Health Services | | X | | | X | |
| Office of Minority Services | | X | | | | |
| Office of School and Community Partnerships | X | | | | | |
| Parole Transition Team | | X | | | | |
| School-Based Clinic Sites | | | | | X | |
| School Based Health Center | | | | | X | |
| Services to Children and Families | | X | X | | X | |
| Troutdale Facility – Work Release Bldg. | | X | | | | |

| Cooperation, Alliances, and Partnerships for 2008-2009: | Admin. | DOIS | SPED | Comm. | HSS | Tech Serv. |
|--|---------------|-------------|-------------|--------------|------------|-------------------|
| Multnomah Early Childhood Program | | | | x | | |
| National Association of School Nurses | | | | | x | |
| National School-to-Work Office | | x | | | | |
| National Society of Fundraising Executives | | | | x | | |
| Native American Youth Association | | x | | | | |
| Nature Conservancy | | x | | | | |
| New Avenues for Youth | | x | | | | |
| Nickerson Center | | x | | | | |
| Norcor Facility – The Dalles | | x | | | | |
| Northwest Health Foundation | | | | x | | |
| Northwest Medical Teams | | x | | x | x | |
| NW Downs Syndrome Association | | | x | | | |
| NWAX (Northwest Internet Exchange | | | | | | x |
| OCCFC | | x | | | | |
| ODE | x | x | x | | x | x |
| Assessment Office | | x | | | | |
| Coordinated School Health | | | | | x | |
| Corrections Education Programs | | x | | | | |
| Department of Administrative Services | | | | | | x |
| OHSU | | x | x | | x | |
| Office of Community Colleges & Workforce Development | | x | | | | |
| Office of Minority Services | | x | | | | |
| Office of Ministry Services | | x | | | | |
| Open Meadow Alternative Schools | | x | | | | |
| Oracle | | | | | | x |
| Oregon Adult & Family Services | | x | x | | | |
| Oregon Association of Education Service Districts (OAESD) | x | | | | | |
| Zone A Superintendents | x | | | | | |
| Oregon Association of School Business Officials (OASBO) | x | | | | | |
| Oregon Association of School Executives (OASE) | x | | | | | |
| Oregon Child Development Commission | | | x | | | |
| Oregon Commission for Children & Families | | x | | | | |
| Oregon Community Foundation | | | | x | | |
| Oregon Council for Hispanic Advancement | | x | | | | |
| Oregon Department of Corrections | | x | x | | | |
| Oregon Department of Human Resources | | x | x | | x | x |
| Administrative Claiming | | | | | x | x |
| Voc. Rehabilitation | | x | x | | | |
| Oregon Developmental Disability Council | | | x | | | |

| Cooperation, Alliances, and Partnerships for 2008-2009: | Admin. | DOIS | SPED | Comm. | HSS | Tech Serv. |
|--|---------------|-------------|-------------|--------------|------------|-------------------|
| Oregon Diabetes Coalition | | | | | X | |
| Oregon Health Plan | | | | | X | |
| Oregon Humane Society | | X | | | | |
| Oregon Immunization Alert | | | | | X | |
| Oregon Institute of Technology | | | | | | X |
| Oregon Partners to Immunize Children (OPIC) | | | | | X | |
| Oregon Public Broadcasting | | X | | | | |
| Oregon School Boards Association (OSBA) | X | | | | | |
| Oregon School Nurse Association | | | | | X | |
| Oregon School Public Relations Association | | | | X | | |
| Oregon State Hospital | | | X | | | |
| Oregon State University | | X | X | | | |
| Oregon Symphony | | X | | | | |
| Oregon Tradeswomen Inc. | | X | | | | |
| Oregon Youth Authority | | X | | | | |
| Oregon Youth Corps | | X | | | | |
| Oregon Youth Conservation Corps | | X | | | | |
| Pacific University | | | X | | X | |
| Parents as Teachers | | | X | | | |
| Portland Bureau of Environmental Services | | X | | | | |
| Portland Community College | | X | | | X | X |
| Portland Community Warehouse | | | X | | | |
| Portland Development Commission | X | | | | | |
| Portland Impact Project Network | | | X | | | |
| Portland Public Schools | | X | X | X | X | |
| Back to School Fair (Alternative Ed. Advisory Committee) | | X | | | | |
| Direction Services | | X | | | | |
| Enrollment & Transfer Services | | X | | | | |
| Night High School | | X | | | | |
| Office of Teaching and Learning | | X | | | | |
| Safe Schools Team | | | | | X | |
| Special Ed | | | X | | | |
| Portland Opportunities Industrialization Center | | X | | | | |
| Portland Parks and Recreation | | X | | | | |
| Portland State University | X | X | X | X | | |
| Practicum Student Program | | X | X | | | |
| Portland Youth Builders | | X | | | | |
| Providence Child & Adolescent Psychiatric Unit | | | X | | | |
| Red Hat Software | | | | | | X |

| Cooperation, Alliances, and Partnerships for 2008-2009: | Admin. | DOIS | SPED | Comm. | HSS | Tech Serv. |
|--|---------------|-------------|-------------|--------------|------------|-------------------|
| Refugee & Immigration Consortium of Oregon & SW Washington | | | x | | | |
| Regional Alternative Schools Consortium | | x | | | | |
| Reynolds Learning Academy | | x | | | | |
| Saint Jude Care | | x | | | | |
| Save Our Youth | | x | | | | |
| School & Community Dental Health Services | | | | | x | |
| School Districts outside MESD and/or Tech Serv resolution | | x | x | | x | x |
| Beaverton SD | | | x | | | x |
| Bend SD | | | | | | x |
| Estacada SD | | | x | | x | |
| Eugene 4J SD | | x | | | | x |
| French American School | | | | | | x |
| Gladstone SD | | | | | x | |
| Hermiston SD | | | | | | x |
| Lord High School | | x | | | | |
| Medford SD | | | | | | x |
| Molalla SD | | | | | x | |
| North Clackamas SD | | x | | | | |
| Oregon Trail SD | | x | | | | |
| Umatilla SD | | | | | | x |
| Vancouver Schools | | | | | | x |
| School Immunization Program | | | | | x | |
| Schools of Nursing | | | | x | x | |
| OHSU | | | | x | x | |
| University of Portland | | | | x | x | |
| Walla Walla | | | | | x | |
| SEI Academy | | | | | x | |
| Shriners Hospital | | | x | | | |
| Siletz Indian Tribe | | | x | | | |
| Sowelu Theater's Outreach | | x | | | | |
| Summer Association of Neighbors | | x | | | | |
| Sun Microsystems | | | | | | x |
| Sun Schools | | x | | | x | |
| SunGard Bi-Tech Software, Inc. | | | | | | x |
| Teen Parent Network | | x | | | | |
| University of Oregon | | x | x | x | | |
| United Parcel Service | | x | | | | |
| United Way | | | x | x | | |
| Urban League | | x | | | | |

| Cooperation, Alliances, and Partnerships for 2008-2009: | Admin. | DOIS | SPED | Comm. | HSS | Tech Serv. |
|--|---------------|-------------|-------------|--------------|------------|-------------------|
| US Fish and Wildlife | | X | | | | |
| Various Businesses (+200) | | X | | | | |
| VersiFit | | | | | | |
| Volunteers of America | | X | | X | | |
| Warner Pacific University | | | | X | | |
| Willamette University | | | | X | | |
| Work Systems Inc. | | X | | | | |
| World Affairs Council | | X | | | | |
| Wrap Around Oregon Consortium | | | X | | X | X |
| Youth Corrections Education Program | | X | | | | |
| Youth Employment Institute | | X | | | | |
| Youth Gangs Outreach Program, NE Coalition of Neighborhoods | | X | | | | |
| Youth Involvement Network | | X | | | | |
| Youth Opportunity Center | | X | | | | |
| Youth Progress Association | | X | | | | |
| Youth Services Consortium | | X | | | | |

APPENDIX B

Multnomah Education Service District

Technology Services

Software Standards

Approved Software for Purchase

Adopted: January 2009

| Application | WINDOWS | | | MACINTOSH | | |
|--|-----------------------------|---------|-----------------------|-----------------------------|---------|-----------------------|
| | Program | Version | On-Line Documentation | Program | Version | On-Line Documentation |
| Operating System | Microsoft Windows | XP | No | Mac OS | 10.5 | Yes |
| Integrated Office Suite | Microsoft Office | 2003 | Yes | Microsoft Office | 2004 | Yes |
| Word Processing | Microsoft Word | 2003 | Yes | Microsoft Word | 2004 | Yes |
| Spreadsheet | Microsoft Excel | 2003 | Yes | Microsoft Excel | 2004 | Yes |
| Presentation | PowerPoint | 2003 | No | PowerPoint | 2004 | No |
| Database | FileMaker Pro | 7.0 | Yes | FileMaker Pro | 7.0 | Yes |
| Web Publishing | Dreamweaver | 8 | No | Dreamweaver | 8 | No |
| Anti-Virus | McAfee | 8.5 | Yes | McAfee/Virex | 8.5 | Yes |
| Mail | Thunderbird | 2 | Yes | Thunderbird | 2 | Yes |
| Web Mail | Google (gmail) | | Yes | Google (gmail) | | Yes |
| Calendaring | Google (gmail) | | Yes | Google (gmail) | | Yes |
| Web Browser | FireFox | 3 | Yes | FireFox | 3 | Yes |
| | Internet Explorer | 7.0 | Yes | Safari | 3 | Yes |
| Instructional Software for Student/Classroom | Determined by Program Needs | | | Determined by Program Needs | | |

NOTE: Manuals and some videos for approved software are available for checkout through Technology Services.

Revised 01/30/2009

MULTNOMAH EDUCATION SERVICE DISTRICT COMPUTER SOFTWARE PURCHASE

Software Standards

The attached software standards for Multnomah Education Service District (MESD) are set by the Network Operations Group and approved by the Director of Technology Services. Recommendations for changes to the approved standards may come from employees and/or the Superintendent's Cabinet. All new software purchases for the application areas listed shall be from the approved list. Software currently in use and not on the list can continue to be used. The purpose of an agency software standard for both the Windows and Macintosh platforms is to assure that we are using the best software for the application on the market, reduce purchase costs by purchasing in volume, uniformity, ease of sharing data between workstations, and increase cross-training of staff.

MESD employees using software on the approved list may receive technical assistance from the Technology Services Department, and may receive training, if available, through MESD training funds. Please contact Technology Services support staff at x1530 for details.

Standard Software Purchase Procedures

Requisitions for software must use the Technology workflow in eSchoolMall. Technology Services will validate products to be purchased and forward to Purchasing Department.

Changes to the Software Standards

These standards are intended to be evolutionary. New application areas may be added and versions of existing programs updated. Routine revisions to existing standards can be requested by sending your requests to the Director of Technology Services. The Network Operations Group reviews the standards on a quarterly basis.

Purchase of Software not on the Approved List

Purchases of non-instructional software not on the approved list will be sent to Technology Services to begin the approval process.

1. Cabinet member approval
2. Technology Services evaluates on the basis of justification of the unique circumstances of application
3. Technology Services Director approval

Please anticipate one week for approval process so that the Technology Services Department may review the request. The purchase of software in application areas not listed need not go through this approval process.

APPENDIX C

Multnomah Education Service District Technology Services

Hardware Standards Approved Hardware for Purchase Adopted: January 2009

PC Desktop Recommendations

We recommend the following minimum requirements for PC desktop use at MESD.

Features/Options

Minimum Requirements:

- 2.2 GHz Core 2 Duo or equivalent
- 17" Flat Panel Monitor
- 2 GB RAM
- 120 GB hard disk
- 10/100/1000 Mbps Ethernet
- DVD burner or combo drive
- Windows XP Professional

PC Laptop Recommendations

We recommend the following minimum requirements for PC laptop use at MESD.

Features/Options

Minimum Requirements:

- 1.8 GHz Core 2 Duo processor or equivalent
- Screen size as needed/appropriate
- 1 GB RAM
- 80 GB hard disk
- 10/100/1000 Mbps Ethernet
- 802.11x Wireless
- Optical drive as needed
- Windows XP Professional

Macintosh/Apple Desktop Recommendations

We recommend the following minimum requirements for Macintosh desktop use at MESD.

Features/Options

Minimum Requirements - Standard User

- iMac Intel Core 2 Duo
- 20" Monitor
- 2 GB RAM
- 120 GB hard disk
- 10/100/1000 Mbps Ethernet
- DVD burner or combo drive
- Mac OS X 10.5x (Leopard)

Macintosh/Apple Laptop Recommendations

We recommend the following minimum requirements for Macintosh laptop use at MESD.

Features/Options

Minimum Requirements:

- MacBook Core 2 Duo 2GHz processor
- 13" or 15" Monitor Screens
- 2 GB RAM
- 120 GB hard disk
- 10/100/1000 Mbps Ethernet
- Optical drive as needed
- Airport 802.11x wireless card
- Mac OS X 10.5x (Leopard)

Hardware Standards

The attached hardware standards for Multnomah Education Service District (MESD) are set by the Network Operations Group and approved by the Director of Technology Services.

Recommendations for changes to the approved standards may come from employees and/or the Superintendent's Cabinet. All new hardware purchases for the areas listed shall be from the approved list. Hardware currently in use and not on the list can continue to be used. The purpose of an agency hardware standard for both the Windows and Macintosh platforms is to assure that we are using the most appropriate hardware on the market, reduce purchase costs by purchasing in volume, uniformity, ease of sharing data between workstations, increase cross-training of staff, and extend the useful life of equipment by allowing the reuse of parts from defunct machines.

MESD employees using hardware on the approved list may receive technical assistance from the Technology Services Department. Please contact Technology Services desktop support staff through the SchoolDude ticket tracking system or at x1579 for details.

Standard Hardware Purchase Procedures

Requisitions for hardware must use the Technology workflow in eSchoolMall. Technology Services will validate products to be purchased and forward to Purchasing Department.

Changes to the Hardware Standards

These standards are intended to be evolutionary. New minimum standards may be added and versions of existing hardware updated. Routine revisions to existing standards can be requested by sending your requests to the Director of Technology Services. The Network Operations Group reviews the standards on a quarterly basis.

Purchase of Hardware not on the Approved List

Purchases of hardware not on the approved list will be sent to Technology Services to begin the approval process.

1. Cabinet member approval
2. Technology Services evaluates on the basis of justification of the unique circumstances of application
3. Technology Services Director approval

Please anticipate one week for approval process so that the Technology Services Department may review the request.

APPENDIX D

Multnomah Education Service District's Instructional Technology Curriculum Guide

This guide is intended to be used by teachers as a tool to help them design curriculum that would teach their students the essential technology skills they must have to be successful in the future and to be able to use technology to learn and demonstrate what they know.

| Common Curriculum Goals | Technology Standards |
|--|---|
| Demonstrate proficiency in the use of technological systems | <p>Basic Operations and concepts:</p> <ul style="list-style-type: none"> •Students demonstrate a sound understanding of the nature and operation of technology systems. •Students are proficient in the use of technology. |
| Access, organize and analyze information using technology tools | <p>Technology communication tools:</p> <ul style="list-style-type: none"> •Students use technology to locate, evaluate, and collect information form 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. <p>Technology problem-solving and decision-making tools:</p> <ul style="list-style-type: none"> •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. |
| Use technology in an ethical and legal manner and understand how technology affects society | <p>Social, ethical, and human issues:</p> <ul style="list-style-type: none"> •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. |
| Create, prepare and present original works using technology | <p>Technology productivity tools:</p> <ul style="list-style-type: none"> •Students use technology 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. |
| Communicate, collaborate and learn using telecommunications and distance learning tools | <p>Technology communication tools:</p> <ul style="list-style-type: none"> •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. |

Reprinted with permission from the National Educational Technology Standards for Students developed by the International Society for Technology in Education (ISTE) and the Oregon Department of Education's proposed Common Curriculum Goals for Instructional Technology.

APPENDIX E

The ISTE National Educational Technology Standards (NETS•T) and Performance Indicators for Teachers (2008)

Effective teachers model and apply the National Educational Technology Standards for Students (NETS•S) as they design, implement, and assess learning experiences to engage students and improve learning; enrich professional practice; and provide positive models for students, colleagues, and the community. All teachers should meet the following standards and performance indicators. Teachers:

1. Facilitate and Inspire Student Learning and Creativity

Teachers use their knowledge of subject matter, teaching and learning, and technology to facilitate experiences that advance student learning, creativity, and innovation in both face-to-face and virtual environments. Teachers:

- a. promote, support, and model creative and innovative thinking and inventiveness
- b. engage students in exploring real-world issues and solving authentic problems using digital tools and resources
- c. promote student reflection using collaborative tools to reveal and clarify students' conceptual understanding and thinking, planning, and creative processes
- d. model collaborative knowledge construction by engaging in learning with students, colleagues, and others in face-to-face and virtual environments

2. Design and Develop Digital-Age Learning Experiences and Assessments

Teachers design, develop, and evaluate authentic learning experiences and assessments incorporating contemporary tools and resources to maximize content learning in context and to develop the knowledge, skills, and attitudes identified in the NETS•S. Teachers:

- a. design or adapt relevant learning experiences that incorporate digital tools and resources to promote student learning and creativity
- b. develop technology-enriched learning environments that enable all students to pursue their individual curiosities and become active participants in setting their own educational goals, managing their own learning, and assessing their own progress
- c. customize and personalize learning activities to address students' diverse learning styles, working strategies, and abilities using digital tools and resources
- d. provide students with multiple and varied formative and summative assessments aligned with content and technology standards and use resulting data to inform learning and teaching

3. Model Digital-Age Work and Learning

Teachers exhibit knowledge, skills, and work processes representative of an innovative professional in a global and digital society. Teachers:

- a. demonstrate fluency in technology systems and the transfer of current knowledge to new technologies and situations
- b. collaborate with students, peers, parents, and community members using digital tools and resources to support student success and innovation

- c. communicate relevant information and ideas effectively to students, parents, and peers using a variety of digital-age media and formats
- d. model and facilitate effective use of current and emerging digital tools to locate, analyze, evaluate, and use information resources to support research and learning

4. Promote and Model Digital Citizenship and Responsibility

Teachers understand local and global societal issues and responsibilities in an evolving digital culture and exhibit legal and ethical behavior in their professional practices.

Teachers:

- a. advocate, model, and teach safe, legal, and ethical use of digital information and technology, including respect for copyright, intellectual property, and the appropriate documentation of sources
- b. address the diverse needs of all learners by using learner-centered strategies and providing equitable access to appropriate digital tools and resources
- c. promote and model digital etiquette and responsible social interactions related to the use of technology and information
- d. develop and model cultural understanding and global awareness by engaging with colleagues and students of other cultures using digital-age communication and collaboration tools

5. Engage in Professional Growth and Leadership

Teachers continuously improve their professional practice, model lifelong learning, and exhibit leadership in their school and professional community by promoting and demonstrating the effective use of digital tools and resources. Teachers:

- a. participate in local and global learning communities to explore creative applications of technology to improve student learning
- b. exhibit leadership by demonstrating a vision of technology infusion, participating in shared decision making and community building, and developing the leadership and technology skills of others
- c. evaluate and reflect on current research and professional practice on a regular basis to make effective use of existing and emerging digital tools and resources in support of student learning
- d. contribute to the effectiveness, vitality, and self-renewal of the teaching profession and of their school and community

Copyright © 2008, ISTE (International Society for Technology in Education), 1.800.336.5191 (U.S. & Canada) or 1.541.302.3777 (Int'l), iste@iste.org, www.iste.org. All rights reserved.

APPENDIX F

National Technology Framework, Standards, and Performance Indicators for School Administrators (2002)

The NETS for Administrators builds on the work of the Technology Standards for School Administrators (TSSA) Collaborative, where ISTE had a leading role in developing these standards. The NETS•A embraces the TSSA vision and extends it to additional administrative job roles. These standards are indicators of effective leadership for technology in schools. They are a national consensus among educational stakeholders of what best indicates effective school leadership for comprehensive and appropriate use of technology in schools.

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 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.

Copyright © 2002, ISTE, 800.336.5191 (U.S. & Canada) or 541.302.3777 (Int'l), iste@iste.org, www.iste.org. All rights reserved.

APPENDIX G

Technology Services Service Level of Commitment for Network Services June, 2007

The following is a description of what service can be provided:

The Network Services team manages the Wide Area and Local Area Networks. This can include T1 lines, Routers, Switches Proxy Services, DHCP Services, LDAP Services, E-mail, as well as the MESD connection to OPEN.

Features of this service include:

- T1 or INet connection to each school and district office includes Router and DSU, or equivalent.
- Technical advisory and discussion groups.
- Planning and coordination of Wide Area Network issues, including dealing with growth issue and network design.
- Active Participation in the Oregon Public Education Network (OPEN) efforts.
- Membership fee to OPEN for Internet and statewide network access.
- Planning, coordination, and migration for I-Net (cable) connections.
- Assistance in establishing and maintaining district network security.
- Assistance in establishing and maintaining Wide Area Network usage standards.
- Network applications including, but not limited to: List server, Calendars, Web Access to Business, HR and Student System reports, LDAP, FTP services.
- Coordination of connectivity projects with local phone/cable/wireless companies for new or upgraded services.
- Redundant transparent proxy servers.
- Electronic Mail Hosting (SMTP) for all students and staff. IMAP, POP3 and Web based clients supported.
- Redundant Mail Relays to limit external access to District mail servers. Mail Relays also provide SPAM filtering and other mail broadcasts that interfere with normal operations.
- Redundant Dynamic IP Address Allocation Servers (DHCP).
- Redundant Domain Name Server (DNS/BIND to translate Internet names into Internet addresses, and vice versa. For security reasons there are two separate sets of systems, 2 for external names, 2 for internal names.
- Installation and upgrades of district owned Nortel routers and DSUs. Management, upgrades, troubleshooting and repair of router software and hardware.
- Monitoring the Wide Area Network, including routers and communication lines.
- Firewall network protection support.
- Internet security system that constantly and automatically monitors for network attacks.
- Web content filtering for all users.

- Uninterruptible power supply with backup diesel generator for all MESD network equipment.

Monitoring of network resources <http://stats.mesd.k12.or.us/>.

If the districts choose not to participate, the effect on students would be:

Non-participating districts that wish to have to other MESD menu items will need to install and manage their own wide area network services including:

- Communication lines to access the Internet.
- All MESD WAN Services.
- Secure encrypted connection to MESD.
- Your own wide area network management.
- Operational by July 1, 2007.

Interrelationships with other Multnomah ESD programs and services:

- Technology Services.
- Business/Human Resource Services.
- Student Services.
- Various web application services.
- Department of Instruction.
- Measurement & Experimental Research
- School Health Services.
- Bloodborne pathogen.
- Student Health records.
- Co-operative Purchasing services.

Appendix H

Technology Services Service Level Commitment Student Services Sept, 2008

This document outlines TS-specific commitments for the Student Information Systems.

Comprehensive Student Accounting and Data Management

TS will provide comprehensive computer applications for student accounting and data management for the subscribing districts. AAL's eSIS is the product TS is using. TS will maintain and manage all software and hardware updates and pay all costs related to annual service fees, updates, and training.

Awareness on a State-Wide Level

The TS Director will stay tuned-in to data center strategies around the state by regularly attending and contributing to the large data centers IT Managers monthly meetings in Albany. These data centers represent 75% of the students in the state. ODE is also represented and regularly reports on their initiatives and consults with the data centers to work toward a coordinated statewide effort.

Training and District / School - Consultation

TS will provide district and/or school-specific consultation upon request. Typical areas for consultation include:

- Video training is provided for eSIS modules.
 - Introduction to eSIS
 - Demographics
 - Daily Attendance
 - Period Attendance
 - Incident Reporting
 - Reporting
 - Year End Transition
- Small group training is provided for scheduling.
- Documentation for data collection and reporting requirements for ODE.
- Download files to third party products.

Customer Support/Help Desk

TS will provide Student Systems Customer Support/Help Desk assistance to all participating districts:

- One phone number for eSIS Customer Support/Help Desk
- Support hours are 7:00 – 4:00 Monday through Friday, year round.
- Callback or email response within 2 hours for problem solving.
- Action requests are handled as soon as possible within the usual workframe.
- Over-the-phone training
- Tips/tricks/shortcuts

On-line Web Access

The eSIS online student information system is available via the Internet using Internet Explorer (6.0 or higher) browser for PCs and Safari (1.2) for Macs. Current workstation requirements are posted on the website.

Security

Access to eSIS is password-controlled. eSIS passwords are user-defined and can be changed by the user. A designated district staff member controls security at the district level. Some users have access to only certain types of data; some users can view data but not change it, and other users have complete access to all data for a school and/or district.

Data Backup Responsibility

All data stored by TS is backed up nightly. Weekly backups are stored at an off-site facility for one week. Monthly copies are created on the last working day of the month and kept for one year.

A database copy of the Student System is taken before the annual Year End Transition (YET).

Special Requests

Requests specific to a particular district's needs which have an impact on services provided to the other districts will be reviewed by the Student Systems User Group committee. If there is an impact on TS's budget, then the request will be reviewed by the TS Advisory. Options for funding will be discussed and may be addressed at the Superintendent level.

Technology Services Student Services

Student Services provides comprehensive computer services for administrative student applications. Technology Services supports the web-based student information system eSIS, developed by Administrative Assistants Ltd.'s. eSIS offers a district-wide web solution with access for administrators, teachers, and professional staff concerned with the management of student records. All school districts in Multnomah County and school districts using services from Clackamas ESD share the same eSIS database instance.

The Student Services team provides the users of the system with a technical help desk environment, district-specific consultation, problem solving, tips/tricks/shortcuts, both instructor led and on-line video training, and documentation.

Program Description:

The following are some data components this software provides:

- Student Registration: Tracks and records student data from the initial date of admission through graduation whenever the student is enrolled in one of the participating districts.
- Student/Family Demographics: Extensive information about the student and parent/guardian, including multiple mailing addresses, siblings, district-wide student/family directories, and emergency contacts.
- Period/State Attendance: Student attendance history, daily and/or period attendance for generating reports and documents according to Oregon requirements; also interfaces to phone messaging systems.
- Progress/Grade Reporting: Records for reporting of student grades on mid-term progress reports, report cards, transcripts, and statistical summary reports.
- Graduation Requirements: Records on student progress toward graduation by curriculum area integrated with the High School Plan.
- High School Plan: An interactive tool to assist counselors and administrators in helping to keep all students on track toward graduation and toward their own goals.
- Transfer/Archive: Records on students that have withdrawn from school are archived and can be accessed by any participating Multnomah County or Clackamas County district. If a student returns or moves, the records can be transferred to the new school.
- Special Services: Records on student enrollment in special programs that receive additional revenue (including Free & Reduced Meals programs, Pregnant and/or Parenting students, and English as Second Language programs).
- State Reporting: Data collection and reporting requirements from ODE and maintains a separate state student number for each student
- Health History: eSIS offers numerous areas of information, including individual health notes and serious health condition indicators, as well as immunization dose tracking and assessment, tuberculosis tracking, health screenings for vision, hearing, and scoliosis.
- Student Test History: Records of students' achievement tests, Oregon State Assessment tests, open-ended tests developed by MESD Student Assessment Services, and Oregon Benchmark Assessment tracking (CIM/CAM/Pass).
- Student Activities: Records on sports eligibility and student participation in activities, which can optionally be printed on transcripts.
- Incident & Disciplinary Processing: Users can track minor to major disciplinary infractions.

- Fees Management: Allows schools to track fees and payments for field trips, books, lab fees, etc.
- Student Scheduling: Ability to assign student schedules on-line for the coming school year without affecting the current year.
 - Mass student course/class forecasting for next year.
 - Computerized scheduling of students into classes.
 - Assistance with creating the school master schedule for next school year.
- Special Education: Ability to track students, Individual Education Plans, referrals, screenings, and reporting requirements.
- Data Downloads: District offices and/or schools can create additional periodic, and frequently spontaneous, downloads and/or download selected data fields into desktop applications (i.e., Word, Excel) or other systems.
- Data Warehouse: Identify and monitor issues at all levels, drill-down for more detail, display graphical and spreadsheet presentations, print, and export data.

Non-Participation Effects on District:

If an alternative is selected, non-participating districts will need to negotiate with TS depending on other MESD services they purchase, such as Health and Social Services, Migrant Education, and Student Assessment Services (see inter-relationships, below).

Inter-Relationships to other Multnomah Education Service District Menu Selections:

- ◆ Technology Services - Network/Internet: Data communication linkages for the Student Services systems are provided by the Network/Internet menu item.
- ◆ Health and Social Services (HSS) - Immunization & TB, Hearing, & Special Needs Nursing: Immunization, tuberculosis, and screening results data is maintained by the HSS menu item.
- ◆ Student Assessment Services (SAS): Student test results are maintained by the SAS menu item.
- ◆ Non-English Speaking Students - Migrant Education: Accesses each district's eSIS database to locate possible migrant students, and then tracks their attendance and academic performance for State and Federal reporting.

APPENDIX I

Technology Services Service Level Commitment Business/Human Resources Services

September, 2007

Comprehensive School District Applications

TS will provide comprehensive computer applications for financial, payroll, and human resources to the subscribing districts. TS will maintain and manage all updates to the systems, pay all costs related to annual service fees/update/training costs.

District-Specific Consultation

TS will provide district-specific consultation upon request. Typical areas for consultation:

- District Level contract changes that require changes in the financial products (district level setup)
- Benefit pooling
- Changes to reporting requirements from ODE, PERS, etc.,
- Office procedure efficiencies
- Interfacing to third party products

Customer Support Services

TS will provide Business/Human Resources customer support assistance to all component districts.

- Support hours are 7:30 – 5:00 Monday through Friday, year round
- Call back or e-mail response within 2 hours for problem solving
- Over the phone training
- Tips/tricks/shortcuts
- Training in classroom, on-site, or other settings

Security

Access to the Business/Human Resources system is password controlled. The school district's identified security administrator controls passwords and other security settings that control access to data down to the field-level. System passwords are changed at regular intervals, and immediately when the need exists.

Data Backup

All data stored by the TS department is backed up nightly (Monday through Friday). Weekly backups are stored at an off-site facility for one week. Monthly tapes are created on the last working day of the month and kept for one year.

Historical HR and financial data is available from the time of initial Ifas implementation (1993 for most districts). TS can restore data back to a specific minute/day

Standardized Check Forms

TS purchases check stock for Accounts Payable and Payroll for all districts to use. The stock is stored in a locked limited access room and is accounted for by control numbers. Almost all available security features are incorporated into the check stock. The user committee reviewed and approved the features selected.

TS assists with the acquisition of check printing forms that are electronically flashed to DIMMs installed in each district's designated printer.

Electronic Filing

TS provides services to facilitate information exchange between financial institutions and constituent districts for EFT transfers, cancelled check file transmissions, Positive Pay, electronic payments to vendors, W2, PERS, and ODE file submission after data is validated by the component district.

Software Upgrades

Changes and upgrades to Ifas and Ifas7i are generated by Sungard Bi-Tech as part of our ongoing maintenance contract with them. Many of their upgrades and enhancements are requested from their user community and are prioritized annually by their user group (BSNUG). TS receives software upgrades from Sungard Bi-Tech annually. The upgrades are loaded into a test environment where the enhancements are tested against the data from multiple districts. Documented changes to the software are distributed to each district prior to testing and implementation. TS coordinates the testing and implementation of the upgrade with the district's processing schedule and selects a time that is least disruptive to the majority of users. Downtime for the upgrade is scheduled to occur during weekend or holiday hours whenever possible.

Documentation

Sungard Bi-Tech supplies electronic documentation to TS, which is distributed to each district as needed.

Research and Development

R&D for the financial system is provided by Sungard Bi-Tech as part of our annual maintenance contract.

Human Resources System

Employee data is initially entered into the HR system. Payroll-specific data is shared with the payroll system.

Tracking and reporting features included in the HR system:

- Automated salary computations
- Ad-hoc CDD reporting
- Updated salary schedules
- Benefit coverage/pooling
- Compensation/Assignment
- Emergency data
- Evaluation tracking
- ODE reporting
- Fingerprint tracking
- License/certification tracking
- Position control
- Position budgeting (Available in Ifas7i)
- Termination
- Tuition/Education
- Workflow modeling and processing

Business System

The Business System is comprised of the following components:

- Accounts Payable
- Accounts Receivable
- Ad-hoc CDD Reporting
- Budget preparation and modeling
- Check Management
- Cash Receipts
- Encumbrance Accounting
- Fixed Assets
- General Ledger
- Job Ledger
- Payroll
- Purchasing
- Stores Inventory
- Workflow modeling and processing

APPENDIX J
Telecommunications Inventories
 January 2009

| Location | Network Equipment | | | | Phone Equipment | | Building Wire Rating | |
|--------------------|-------------------|--------|-----------|----------|-----------------|----------------|----------------------|------------|
| | CSU/DSU | Router | Hub Ports | Circuits | Phone Sets | Circuits | Category 5 | Category 6 |
| Ainsworth | 0 | 3 | 288 | 500MB | 253 | 3 PRI-T1, 6 B1 | | X |
| Alpha | 0 | 1 | 48 | 100MB | 36 | 4 B1 | X | |
| Arata Creek School | 0 | 1 | 48 | 100MB | 24 | 6 B1 | X | |
| Donald E. Long | 0 | 1 | 48 | 100MB | 8 | 4 B1 | X | |
| Edwards | 0 | 1 | 64 | 100MB | 75 | 3 B1 | X | |
| Helensview H.S. | 0 | 1 | 64 | 100MB | 53 | 5 B1 | X | |
| Pathways | 0 | 1 | 24 | 100MB | 28 | 3 B1 | | X |
| Thompson | 0 | 1 | 64 | 100MB | 66 | 6 B1 | | X |
| Warehouse | 0 | 1 | 8 | 2 T1 | 6 | T1, 2 B1 | X | |

Computer Workstation Inventory
 January 2009

| Location | Workstations | | | |
|--------------------|--------------|-----------|-----|-------|
| | Office | Classroom | Lab | Total |
| Ainsworth | 240 | | 30 | 270 |
| Alpha | 4 | 10 | 30 | 44 |
| Arata Creek School | 6 | 30 | 8 | 44 |
| Donald E. Long | 3 | 15 | 28 | 46 |
| Edwards | 60 | | | 60 |
| Helensview H.S. | 10 | 35 | 35 | 80 |
| Pathways | 10 | 15 | 20 | 45 |
| Thompson | 55 | | | 55 |
| Warehouse | 4 | | | 4 |

Appendix K



**Multnomah Education
Service District**

IFAS Strategic Plan

December 2, 2008

Introduction

The Multnomah Education Service District and seven of the eight component districts have been using SunGard Public Sector's Integrated Financial Administrative Solution (IFAS) financial accounting and human resource system since 1994. In 2006 IFAS was reevaluated and the decision was made to continue using this system for financial and human resource accounting needs. But while IFAS possesses significant functionality, much of it is not currently being used, either by MESD staff or by the component districts.

The benefits of leveraging IFAS are substantial. By streamlining key business processes and using the system well the MESD and component districts can realize significant improvements in staff efficiency while greatly reducing paper output and related filing efforts and space requirements. Approval activities may be fully automated (and therefore paperless). Perhaps one of the most important benefits will be that staff at all levels, including superintendents, principals, managers can have available on their desktops and on demand the tools and information they need to get their jobs done. A comparative summary of this paradigm is included as Attachment A.

This document defines an overall strategy to bring the MESD and each component district to full utilization of the tools available through IFAS. It is unquestionably a major undertaking that will require much effort from everyone involved and require each organization to undergo significant cultural changes. However, if done properly and the inhibitors are successfully overcome the benefits will far outweigh the effort.

Current Assessment

Current practices and use of IFAS may be characterized as follows:

- Access to the system is in most cases limited to business services and human resources staff, but even these personnel use only limited functionality.
- Many users still use a third party terminal emulation program, Reflection, to access IFAS in spite of the fact that this has been an outdated interface for over 12 years. Reflection was replaced with a graphical user interface called Insight. With the release of the 7i Dashboard approximately five years ago and the fundamental shift of the IFAS product to web-based, Insight itself is nearing obsolescence, yet neither of these tools are in frequent use by many users throughout MESD and the component districts.
- The current 7i Dashboard interface, which is entirely web-based, has not been set up to take full advantage of the functionality it offers and it is therefore being greatly underutilized.
- In spite of the fact that the counterpart web-based 7i screen has been available for up to five years, in many cases, classic screens are still being used by staff throughout the organizations.

- Transactions typically start with a paper form or are created using spreadsheets or other third party applications before being entered into IFAS, constituting duplication of effort.
- Virtually all approvals are obtained by manually routing forms and other paper documents for signature. One notable exception is the Workflow model used to approve purchase requisitions at David Douglas School District.
- Forms and other materials are in most cases filed, requiring additional and significant amounts of effort and utilizing valuable office space.
- A significant amount of data is collected and maintained on spreadsheets and other side systems due in large part because users have not been able to easily obtain the information they need directly from the financial system. These systems constitute duplication of effort and require a significant amount of personnel resources to maintain.
- Reporting options have been limited in large part to standard, character-based reports or, in MESD's case, a reporting tool developed in-house called the Budget Reporting System (BRS). In contrast, IFAS includes a fully functioning report writer, Click Drag and Drill (CDD), which can provide presentation-quality formatting and drilldowns to underlying detail. To date, CDD has been limited primarily to human resource staff.

Strategic Objectives

When the components of this plan are completed the following should be fully operational, in active use and observable:

Information

- Click Drag and Drill report formats will be available to produce a variety of reports and/or inquiries for each active subsystem and the general ledger. This will include operating budget to actual financial statements, transaction detail reports, and a complimentary array of reports to support purchasing, accounts payable, accounts receivable, fixed assets, human resources, payroll and all other activities supported by the financial system.
- All users of financial and human resource information will have access to a customizable Dashboard, providing access to the screens and inquiries from which they can obtain the information they need to do their jobs, on demand.
- All inquiries, where practical, will provide the ability to “drill down” to supporting detail and other related information.
- Inquiries will also have the ability to drill down to images of supporting documentation such as invoices, bids, quotes, etc.

Forms

- Wherever deemed practical and cost effective, paper forms will be replaced with an input screen so that the transaction originates in digital form and duplication of effort is eliminated.
- Transactions initiated online will be routed electronically using Workflow for approval and/or review, as necessary.
- The status of and other information regarding transactions in process will be readily available to users by inquiry and on demand and thus minimize the need to print reports whenever this information is needed.

Filing

- Because many transactions will be initiated from a screen and remain in electronic form, and incoming supporting documentation will be scanned or otherwise captured as digital images, there will be a reduced need to maintain filing cabinets. As old files are purged and/or shifted to outside storage many of these file cabinets will be removed. The time saved by eliminating the manual filing requirements will be redirected to other activities.

Supplemental Systems

- As stated above, information will be readily available to users on demand. This in turn will eliminate and/or greatly reduce the need to rely on spreadsheets and other tools to collect data and provide this information. The time saved by eliminating this effort will be redirected to other activities.

Approach

In most cases, MESD will implement the functionality first before it is implemented at a component district site. This approach will allow MESD Business, Human Resource and Technology Services staff to work through and resolve the many issues inherent with implementing new technology and process change, thereby helping to minimize the impacts on component district resources when the same functionality is implemented there. Exceptions to this approach will be modules that are pertinent only to the component districts and not the MESD, such as the Student Activities module.

MESD staff will partner **with** the component districts in the execution of the components of this strategic plan. MESD will commit to providing all resources at its disposal to assist the component districts in achieving these goals.

Each component district will work closely **with** MESD staff as required to resolve issues in a professional and efficient manner. The execution of this plan should be viewed by all parties as a business partnership.

Critical process reviews and subsequent reengineering of these processes will be a critical component in the achievement of these goals. As is typical of most organizations, many of the key accounting processes have not been reviewed in many years and are therefore likely candidates for significant change and improvement. Strong leadership will be required in order to successfully make these changes.

Costs

With limited exceptions there will be no additional cost to the component districts for services provided by MESD staff in the execution of the plan components. Districts will be expected to pay for the following items:

- An appropriate scanner for use with processing accounts payable invoices, cash receipts and other documents.
- A pro rata share of the licensing and maintenance fees for modules either previously licensed by MESD Business Services or modules acquired in the future. The Bid Online and Subtracker modules either have been or soon will be licensed by MESD Business Services. Component districts wishing to implement these modules will be required to pay a license fee.
- Laser forms developed by SunGard Public Sector staff that are specific to each district.
- Other hardware and software that is specific to the individual component district.
- Additional training and support specific to a district's needs or desires that is not provided by MESD staff.

Components

1. **Dashboard Development and Deployment-** All staff, including superintendents, principals and other management, should have available a fully functioning Dashboard from which they may access the screens and information they need in order to get their jobs done.
2. **Development and Deployment of Core Financial CDD Inquiries-** A full complement of CDD reports supporting each module should be available to all who need them. Drilldowns to further detail and/or related information should be available in most cases.
3. **Documents Online-** This module provides the functionality to capture supporting documents as digital images, attach them to transactions (databound attachments), and allows users to view these documents by drilling from reports and screens, on demand. Over time, the organizations should realize significant time and space savings since filing of these documents may be entirely eliminated.
4. **Workflow-** This tool enables the organization to eliminate paper forms and processes, instead providing a means to easily route transactions through email or electronic task list for review, approval and/or notification. All routing and approval activities are automatically tracked and logged, providing a detailed audit trail of each transaction.
5. **Requisitioning-** End users will create purchase requisitions directly on screen without first completing a paper form. Requisitions will be routed for approval electronically using Workflow. Upon final approval, the resulting purchase order may be emailed to the vendor automatically using Workflow. The printing of purchase orders will only be necessary if the

vendor requires a physical copy, otherwise the process will not generate any paperwork to be filed, thus saving valuable staff time and resources.

If a purchase order needs to be printed, it will be accomplished using an Easy Laser Form (ELF) digital form or CDD report, thus eliminating the need for preprinted purchase order forms

6. **Accounts Payable Suspense Process (APOHININ / APOHINVP)**- This functionality replaces the traditional batch process and allows the entry of invoice data without validation. Rather, the validation process is performed separately and distributes fully validated transactions while suspending those with one or more issues. Workflow will be used as appropriate to notify users of required action such as the need to enter receiving information.

In conjunction with the implementation of this process, invoices will be scanned and processed as digital images using Documents Online. This functionality is fully integrated with the accounts payable process and provides a seamless means to attach the invoice image to the transaction.

7. **Timecard Online**- Currently, each component district uses paper timesheets to capture staff time and/or leave. The timesheets are routed manually for signature approval prior to being entered into the payroll system, requiring complete duplication of effort. In contrast, MESD utilizes a timesheet program developed in-house. Non-temp staff enters their time in the program and submit them for approval. Supervisors log into the system and approve timesheets before an interface is run to create IFAS time entry. While this process is comparatively more fully automated, it still requires significant payroll staff time for reconciliation of the time entries.

IFAS includes a recently rewritten and updated online timecard program that is fully integrated with the payroll module. Implementing this functionality will eliminate process redundancies and interface challenges. Workflow will route submitted timesheets for appropriate approval.

8. **Subtracker Module**- Most of the component districts currently use the third party Subfinder substitute finding system. Teachers call the Subfinder system to report that they will not be at work due to sickness and other reasons. The Subfinder system then calls substitutes until it contacts one who takes the job. While the Subfinder system is fully capable of generating both the teacher leave entry as well as the substitute time entry, this functionality is not currently being used. Instead, substitutes and other temporary employees record their time on paper timesheets which are then routed manually for signature approval before being entered into IFAS. Significant amounts of staff time and resources are regularly expended on this process.

The Subtracker module retrieves time entries from the Subfinder system and adds the appropriate leave codes and account number values required by IFAS payroll. Implementing this module will fully automate the time collection and reconciliation process.

9. **Upgrade to IFAS Version 7.9-** This release largely completes the migration of IFAS to a solely web-based product. Security has been significantly changed and enhanced, presenting an opportunity to revisit this area and clean up/ correct security issues.
10. **Human Resource and Payroll Functionality-** Significant enhancements to these modules have been added over the past several years that have not been implemented by the MESD or component districts. Functionality such as Payroll Contract Processing can save significant staff time and improve efficiency.
11. **Cash Clearing/Claim on Cash/ Subsystem Interface Changes-** The methodology used to post transactions between the various subsystems and the general ledger, and cash handling is outdated and needs to be modified to add a cash clearing fund with each fund possessing a claim on its respective share of the total pooled cash and investments.
12. **Account Code Structure Cleanup and/or Reorganization-** Currently, each component district shares a similar general ledger account code structure that enables, among other things, CDD reports to be easily shared between the districts without the need for modification. However, many background part values are not adequately defined and are therefore underutilized.
13. **Recurrent Journal Entries-** This functionality automates routine calculations and allocations such as monthly interest allocations (based on average daily cash balance) and indirect cost allocations.
14. **Purchasing Card Program and Interface-** MESD has recently completed a reimplementaion of the Bank of America Works purchasing card program, including substantial revisions to internal procedures and controls. An interface has also been developed and deployed to easily bring P-card transactions into IFAS. This interface should work with transactions generated from any P-card program.
15. **Check Management to Bank Reconciliation Conversion-** A majority of the component districts are still using the Check Management module. This is now seriously outdated and each will need to convert to the Bank Reconciliation module prior to upgrading to the 7.9 release of IFAS. Bank Reconciliation provides for essentially automated transaction matchup and reconciliation between cleared bank transactions and IFAS and will save considerable staff time.
16. **SmartDB Fixed Assets to 7i Fixed Assets-** A majority of the component districts are still using the SmartDB version of the Fixed Assets module. This is now seriously outdated and each will need to convert to the 7i version prior to upgrading to the 7.9 release of IFAS. The newer version of this module offers a much richer feature set as well as an automated interface between purchasing, accounts payable and Fixed Assets.
17. **Employee Online-** This provides employees with self-service functionality to view past paycheck stubs, change filing status and number of exemptions, sign up for and/or change direct deposit, update contact information, and perform “what-if” calculations based on various changes.

18. **Accounts Receivable-** This module provides very robust functionality that is, for the most part, not currently being utilized.
19. **Scheduled Human Resource and other Workflow Models-** Workflow models may be scheduled to run at regular intervals, providing a simple means to automatically notify necessary staff of pending actions such as employee performance reviews, license expirations, etc.
20. **Employee Expense Reimbursement and other Web Forms-** Inherent in the Workflow tool is the ability to create web forms which may be deployed to end users to perform such functions as employee expense reimbursement, request pay assignment changes, supervisor changes, etc.
21. **Comprehensive Annual Financial Report Generation-** Currently the MESD and each component district uses spreadsheets to produce the required financial reports for inclusion in the annual CAFR report. With the addition of general ledger background parts, these reports may be generated straight from IFAS.
22. **Job Ledger-** The Job Ledger provides very powerful tools to track and report financial activity for specific capital expenditures, events, and other projects. Nevertheless, in most cases this functionality has never been used.
23. **Budget development and Publishing-** Currently, annual budgets are developed using spreadsheets and/or Access database tools. The goal will be to shift these entry and development efforts to IFAS and/or other third party products to provide a more uniform set of tools.
24. **Applicant Online-** This module provides the ability to post position openings to a website and allows applicants to apply online.
25. **Student Activities Module-** The Student Activities module allows the user (such as a school bookkeeper, a club advisor, or perhaps a student officer) to record money collection, establish spending limits, request checks, and other financial functions necessary to operate a club or association. The screens are designed to allow the user to access and utilize the system with little or no training required.
26. **Professional Development Module-** This module provides tools to create and manage staff education programs via the Web, allowing direct access to teachers and other staff to view class schedules.
27. **Bid Online Module-** Currently, bids for goods and services is a largely manual process with the MESD and component districts. All bid documents are printed and mailed to prospective vendors. Resulting bids are manually tabulated with the winning bidder entering into a contract for the required goods and/or services.

The Bid Online module provides functionality to develop online bid questionnaires, incorporate all related documents needed by bidders, and publish the bids online. Vendors then respond online, the responses are evaluated, and upon award, a purchase order is automatically generated. Bid Online fully streamlines and automates this process.