**Westbrook Walnut Grove Independent School District #2898**

**Technology Plan**

July 1, 2004-June 30, 2007

Contact:

Loy Woelber

Westbrook Walnut Grove Schools

PO Box 129

Westbrook, Minnesota 56183

(507) 274-6111

lwoelber@mntm.org

Technology Plan On Line:

www.wwgschools.org/wwgtech.lasso

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**A. Planning and Needs Assessment**

1. Organization Leadership and Technology Planning Committee

Day to day management of district computer technology resources are conducted by the technology coordinators at Westbrook (Duane Hannan) and Walnut Grove (Mary Jo Hendrickson).  In Westbrook, Hannan (1/4 time) is assisted by Torild Jacobsen (1/2 time) and Sheng Vang (1/4 time).  In Walnut Grove, Mary Jo Hendrickson (1/4 time) is assisted by Diane Warner (1/2 time) and Kathy Filter (1/2 time).  Hannan and Hendrickson work under the direction of principals Bill Richards and Paul Olson respectively.

The technology coordinators' responsibilities include:

a) day to day maintenance of the network and related computers and equipment;

b) assisting faculty and staff in the operation of the network and operation of the software;

c) researching and purchasing hardware and software;

d) assisting faculty in integrating technology into class routines.

Assistants' responsibilities include:

a) computer maintenance;

b) assisting faculty and staff in the operation of the network and software;

c) lab supervision.

Westbrook Walnut Grove Schools has a Technology Committee that meets irregularly to recommend policy.  The members are the technology coordinators Duane Hannan and Mary Jo Hendrickson, the principals Paul Olson and Bill Richards, the superintendent Loy Woelber, school board members Jim Schmidt, Tim Helmer, and Kerry Knakmuhs, and community members Rocky Kolar and Brenda Seeger.

2. Demographics

Westbrook Walnut Grove Schools (Independent School District #2898) is located in Cottonwood and Redwood Counties in southwest Minnesota.  An elementary/middle school is located in Walnut Grove; an elementary/high school is located in Westbrook.  The student population is approximately 535.  The faculty and support staff population is approximately 80.

Prior to 2000, Westbrook Walnut Grove Schools had a population nearly exclusively of Northern European heritage. Since then, however, many of Hmong heritage have moved to the area from the Twin Cities. The students of Hmong heritage comprise approximately 20% of the student population. By facilitating communication with Hmong communities elsewhere in the country, the communications functions of our network have smoothed the integration process for our new students. Because of the influx of the Hmong population, Westbrook Walnut Grove Schools has grown over the last few years; we expect the growth to continue at the same rate for the next several years as more families of Hmong heritage arrive in Minnesota from Thailand and learn of the benefits of small town life.

We are a relatively isolated rural education community. Physical access to research facilities is extremely difficult. Given our isolation, and the demands of modern curriculum, virtual access to resources has been highly utilized. Hits to our local website, a clearinghouse for access to both local and remote resources, have been high: approximately 7,000 per month. Utilization of remote research resources has increased steadily as teachers have integrated them into their classes.

3. Needs Assessment

Technology coordinators in the Westbrook and Walnut Grove buildings work closely with administrative, faculty, student, and community stakeholders, and conduct ongoing needs assessments, surveying needs regarding access to technology, technology training, and information delivered through technological means. The technology coordinators survey our populations continuously, seeking input and providing ideas and research for integrating current and instituting new technologies.

**B. Vision Goals, Objectives and Strategies for Technology**

The mission of technology and technological services of Westbrook Walnut Grove schools is first to provide the tools for students, faculty, and community members to learn; second to expose students, teachers, community members to emerging technologies; and third to assist in the efficient management of our schools.

We believe all children can learn, and that the use of technology will enhance the learning experience of each child. Using technology is a basic skill that will help students become lifelong learners capable of critical thinking and problem solving and will help students find meaningful positions in the modern workplace.

Students in our school will:

1. use technology resources to learn and track their learning;

2. use technology to collaborate with others;

3. use information resources critically.

Specific Technology Outcomes:

**Word Processing**

Upon completion of the 12th Grade the student will be able to . . .

--type 35 words per minute with proper finger placement and body posture 100% of the time;

--use advanced formatting tools with direction;

--employ word processing skills to solve problems in classes without direction.

Upon completion of the 8th Grade the student will be able to . . .

--type 20 words per minute with proper finger placement and body posture 100% of the time;

--use the spell checker and thesaurus independently;

--employ word processing skills to solve problems in classes with direction.

Upon completion of the 4th Grade the student will be able to . . .

--know the keyboard (type 5-10 words per minute with proper finger placement);

--use the copy and paste functions independently;

--use the spellchecker and thesaurus with direction.

**Data processing**

Upon completion of the 12th Grade the student will be able to . . .

--collect data, make graphic representations of the data, and integrate the information into reports independently.

Upon completion of the 8th Grade the student will be able to . . .

--collect data, make graphic representation of the data, and integrate the information into reports with direction.

**Image processing**

Upon completion of the 12th Grade the student will be able to . . .

--support documents with processed scanned images and processed digital photography independently;

--use advanced image processing and graphics tools (layers, selection tools, color correction, filters, pen tools) with direction.

Upon completion of the 8th Grade the student will be able to . . .

--support documents with processed scanned images and processed digital photography with direction;

--use intermediate image processing  and graphics tools (some selection tools, brush sizes, resizing tools) with direction.

Upon completion of the 4th Grade the student will be able to . . .

--use basic image processing and graphics tools (object and drawing tools, some selection tools) with direction.

**Video production**

Upon completion of the 12th Grade the student will be able to . . .

--write a treatment, script, shooting script independently;

--understand the implications of the various types of shots on the emotional state of the viewer;

--edit video to create a coherent whole independently.

Upon completion of the 8th Grade the student will be able to . . .

--write a treatment, script shooting script with direction;

--edit video to create a coherent whole with direction.

Upon completion of the 4th Grade the student will be able to . . .

--operate a VCR and video camera independently.

**Multimedia**

Upon completion of the 12th Grade the student will be able to . . .

--integrate text, graphics, video, and audio information into a unified whole independently.

Upon completion of the 8th Grade the student will be able to . . .

--integrate text, graphics, video, and audio information into a unified whole with direction.

Upon completion of the 4th Grade the student will be able to . . .

--integrate text and graphics into a unified whole with direction.

**Research**

Upon completion of the 12th Grade the student will be able to . . .

--use advanced Boolean searches to find desired information independently.

Upon completion of the 8th Grade the student will be able to . . .

--use search engines to find desired information independently.

Upon completion of the 4th Grade the student will be able to . . .

--use search engines to find desired information with direction.

In most cases evaluation of the objectives above is implied and contained within the objectives.  At this time, evaluation methods and mastery levels have not been standardized. See individual lesson plans for a description of the tools used for measuring performance and the levels of performance expected.

Technology usage and curriculum is integrated into most courses.  In addition, Westbrook Walnut Grove schools offers the following specialized technology oriented classes: Keyboarding, Computer Applications, Word Processing, Photography, Video Production, Desktop Publishing, Computer Assisted Drafting, and Advanced Mechanical Drafting.

Faculty in our schools will:

1. use technology to efficiently manage operations;

2. use technology to collect, archive, and access information;

3. use technology to assist in the delivery of instruction.

Community members will:

1. use technology to access information about school activities;

2. use technology to access information about school and student performance;

3. use technology resources to learn and to access world information.

Access to the district's technology resources is provided to the community through community education classes.  The district has offered

classes in basic internet access, basic emailing, basic image processing, and basic web page design.  Community members also have access to evening open labs once per week and by appointment; file services and email accounts are available upon request.

Westbrook Walnut Grove Schools has committed itself to providing access to the information we generate.  Students, teachers, administrators, parents, and community members have access (with passwords where appropriate) to the following: grades, attendance, lunch bills, photo albums of theater productions and special events, computer applications class webpages, lesson plans, monthly class newsletters, class descriptions, department descriptions, grad standard requirements in each discipline, course preregistration tabulation, daily announcements, a current calendar of events, daily announcements, closing/late start information, athletic schedules, fine arts schedules, library holdings, staff development activities and budgets, continuing education records, a directory of faculty and assignments, faculty biographies, inventories of school materials, school board agendas and minutes, webpage hits records, and community education class lists and registration information.

**Specific goals for the 2004-2007 term:**

1. Faculty, students, and parents will use web-based data collected from NWEA assessments, which currently assess students in second through tenth grades, providing diagnostic oriented results in language, reading, and math, to plan student academic careers and instructional objectives.

Strategy: The district will work to integrate a web-based system to access student assessment scores into its existing web-based information system.

Strategy: The district will direct parents, in regular mailings and during open houses, to the web-based access points and instructions to review and understand their students' assessment results.

Assessment: The district will track hits to the access points and track inquiries about the system.

Strategy: The faculty will be offered staff development and inservice

opportunities to learn how to use assessment results.

Assessment: The district will survey the staff regarding course adaptation in response to the assessment results.

2. The various inventory records will be shifted into web accessible format, and a replacement schedule for technology related equipment will be developed.

Strategy: The district will encourage faculty and support staff to use the on-line inventory system to track district material.

Assessment: The district will survey use of the system and track the progress towards full utilization.

3. Faculty and students will make greater use of on-line resources.

Strategy: The faculty will receive inservice training to learn what resources we have and how to use them.

Strategy: The district will provide the opportunity for teachers to develop lesson plans whose specific objectives relate to using our on-line resources and assign the curriculum to teachers in a variety of disciplines.

Assessment: The district will track the assessments used to measure students' understanding of, and ability to use, our on-line resources in the classes in which the curriculum is placed.

4. Parents and the community will have access to streaming student presentations.

Strategy: The faculty will receive inservice training to learn how to prepare audio and video for web streaming.

Assessment: The district will monitor the uploading of materials to be streamed.

Strategy: The district will direct parents, in regular mailings and during open houses, to the streaming projects access points.

Assessment: The district will monitor hits to the streaming projects access points.

5. Faculty will use staff development opportunities to gain the skills needed to teach the technology standards.

Strategy: The district technology coordinators will conduct workshops

to familiarize teachers with the district technology curriculum and to teach teachers the skills needed to instruct their students.

Assessment: The district will monitor technology lessons in the and student achievement in the classes in which the curriculum is placed.

6. The faculty will identify possibilities for web-based data delivery in order to move further toward data-driven decision making.

Strategy: During common planning time and inservice time, the faculty will survey the information currently and brainstorm additional possibilities.

Assessment: The district will monitor the growth of school information presented to the public.

7. The district will update its on-line staff development/continuing education system to reflect our recently revised continuing education policy.

Strategy: The district will support efforts to make the staff development/continuing education system currently deployed into a more efficient and informative system.

Assessment: The district will survey those who access the site to establish the success of the update.

8. The district technology coordinators will conduct a data and network security audit yearly and act to prevent current or potential weaknesses.

Assessment: The district technology coordinators will make a report to the administration following each year's audit and actions.

**C. Policies and Procedures**

Westbrook Walnut Grove Schools has the following policies regarding technology use:

1. Internet Usage Policy (See Appendix A)

2. Data and Network Security

Westbrook Walnut Grove Schools secures data both physically and virtually.  In both buildings data servers are located in semi-secure areas, areas where students and the public are not allowed.  Critical databases, such as our SIS systems, are password protected.  Access to web-based attendance reporting and grade book services is password protected.  Access to file

server user folders and files is password protected. Backup of critical data is made daily.  The district technology coordinators will conduct and act upon yearly security audits.

3. Internet Safety and Children's Internet Protection Act Compliance (See Appendix B)

4. Disaster Recovery Plan (in preparation)

**D. Technology Infrastructure, Management, and Support**

Westbrook Walnut Grove Schools has two mostly switched computer networks, one in Walnut Grove and one in Westbrook, with web-based, WAN service links between them for, for example, common lesson plans and calendar access.  The network in Walnut Grove provides file services and web page delivery services, automated library checkout services, and extends to each class room, to two labs, to the media center, to the lunch room, and to each of the offices.  One of the two labs (34 computers) is web and image processing capable; the other (30 computers) is primarily a keyboarding lab. The network in Westbrook  provides file services, web page delivery services, district library card catalog search services, and mail services, automated library checkout services, and extents between the two Westbrook buildings via fiber, to each class room, to three labs, to the media center, and to each of the offices.  The Westbrook network also provides web services to a chiropractic business operated out of the Tech building.  Each of the three labs (14 computers, 14 computers, 20 computers) in Westbrook is web and image processing capable.  The buildings in each town are connected to the world wide web via T-1 lines.

Westbrook Walnut Grove Schools is part of a service cooperative, Southwest/West Central Service Cooperatives, from whom internet service (email and IP), firewall service, and various consulting services are rendered.

The majority of instructional and office computers are Mac computers. They run a variety of applications including web browsers, specialized research search engines, word processing/spreadsheet/database suites, image processing programs, video processing programs, presentation programs, and specialized instructional programs in a variety of disciplines

including reading and arithmetic. The business department in the high school operates a small lab of PC computers running specialized accounting software and web browsers. The district office operates PC computers using specialized accounting and reporting software. Westbrook Walnut Grove Schools uses several JMC products to manage attendance, student grades, and lunch services and to process MARS data. Both Westbrook and Walnut Grove campuses have laptop computers for checkout. The average age of instructional and office computers is three years. The ratio of students to student accessible, internet connected computers is approximately 6 to 1. Each teacher and administrator is provided with a web capable, image processing capable computer.

Each building has the technology infrastructure to receive and deliver interactive video programing.

Both Westbrook and Walnut Grove campuses have projection devices for instructional and student presentations. Both campuses have several digital still and video cameras available for check out from the media centers. Scanners are located in each lab.

The district is currently in the process of establishing replacement schedules for our computer and network equipment.

**E. Role of School Media Center**

The main building in Westbrook and the building in Walnut Grove both house media centers. We have combined the card catalogs from both media centers into a web delivered system using Chancery software. Students in Walnut Grove may search the collection in Westbrook using a browser and visa versa. The two media centers assimilate new items two or three times per year into the common database. Both media centers also have on-line access to web-based information warehouses provided by InfoTrac/Galenet, ProQuest, and OCLC.

**F. Staff Development and Training**

District staff receive training from a variety of sources including our service cooperative and in-service from the local technology coordinators. Office staff receives specialized training in the JMC student management

software. Administrators, teachers, and proctors have received training from NWEA in the use of their assessment software. Staff development funds may be used to support staff training in technology.

Technology coordinators take part in specialized training from a variety of sources, again with support from staff development funds. They also attend quarterly area user group meetings and TEAM meetings conducted by Apple Computer. Other technology support staff generally receive training on the job by the local technology coordinators.

See Goals and Strategies One, Three, Five, Six, and Seven above for specific training goals, strategies, and assessments.

## G. Budget for Technology

The funds the district has spent on technology hardware and software have increased over the last few years, from approximately $15,000 in 2000 to approximately $22,000 in 2004. The school board has responded to an increasingly technologically savvy staff, who have integrated more technology into their courses, increasing the demand for web-based information and image and video processing capabilities, with upgraded computers and software. In addition, the district has responded to our increased enrollment with additional lab machines in Walnut Grove and an additional lab in Westbrook, both of which have required funds beyond the normal budget. The district recognizes that continued increases in enrollment will impact the budget, possibly requiring additional supplemental funds.

The funds directed by the district toward technology are used for subscription internet services, hardware, and software. Approximately 80% of the funds in the district budget covers ongoing expenses, such a computer/server replacement, printer/toner expenses, repair, software upgrades, keyboard/mouse replacement, and materials such as backup tape. Training expenses are covered by staff and curriculum development funds.

## H. Implementation Plan

For the 2004-2005 year:

1) implement a web-base system for parent access to NWEA assessment

information; provide parents with information about using the data--ongoing;

2) train teachers to use NWEA data in designing class lessons and activities--ongoing;

3) train teachers in using the web-based inventory system--ongoing;

4) train teachers to use local and web-based technology resources--ongoing;

5) review the district technology curriculum; train teachers in the related technology--ongoing;

6) update the web-base staff development/continuing education system;

7) develop a disaster recover plan;

8) develop a technology replacement/upgrade schedule.

 For the 2005-2006 year:

1) assess/update the web-based system for parent access to NWEA assessment information;

2) assess the impact on course design and instructional delivery of NWEA testing data;

2) train teachers to use the districts streaming audio and video capabilities;

3) survey the staff regarding web-based data delivery possibilities;

4) continue ongoing training.

 For the 2006-2007 year:

1) assess the technology plan; develop 2007-2010 technology plan;

2) continue ongoing training.

## I. Evaluation Plan

 The district has met or exceeded most of the needs indicated in the 2000-2003 district technology plan.  1) the district has provided training to teachers to increase their general technology skills; teachers are using the JMC gradebook and automated grade reporting features, online attendance, and most are able to integrate image processing into their classes; 2) the district has maintained its level of specialized technology oriented classes and added equipment to meet the requirements of increasing enrollment; 3) the district has maintained its level of community education classes in technology and the level of community access to our resources; 4) the district

has increased the amount of information collected and disseminated through its website; 5) the district has completed the integration of the two buildings' card catalogs and made progress in finishing the data entry of the collections; 7) the district has added projection devices to our inventories; 8) the district has researched and rejected the usefulness of voice over IP; 9) the district has added software that supports elementary curriculum; 10) the district has reviewed its current library of software and purchased or will purchase upgrades.

Evaluation of our current plan is indicated with the specific goals in the **Vision Goals, Objectives and Strategies for Technology** section above. Specific assessments for each goal and identification of who is responsible for the assessments is an important feature of our plan, which points to a comprehensiveness not present in our previous plan. The assessments and reports to the various interest parties will be ongoing as the district moves through implementation.

Duane Hannan
April 27, 2004

**Appendix A**
<u>Acceptable Internet Usage Policy</u>

Westbrook Walnut Grove Schools, Independent School District #2898, recognizes the power and potential of the internet as both a potential source of information to integrate into our curriculum and as a potential future workplace for our students.

The district also recognizes the hazards inherent in such an open and free system and therefore establishes the Internet Usage Policy.

1) The district recommends that students do not provide, across any internet channel, personal information; students are required to report to the administration any communication or solicitation for communication, that the student feels might be inappropriate;

2) the district will allow students to publish webpages of an academic nature with prior review and consent of the administration;

3) the district prohibits using the network for illegal, inappropriate, or obscene purposes, or in support of such activities. Illegal activities shall be defined as a violation of local, state, and/or federal laws. Inappropriate use shall be defined as a violation of the intended use of the network, which is the pursuit of intellectual advancement. Obscene activities shall be defined as a violation of generally accepted social standards for use of public owned and operated equipment; downloading sexually oriented materials or "hate" materials is strictly prohibited;

4) the district prohibits intentionally disrupting network traffic and connected systems;

5) the district prohibits using district computing resources for personal commercial activities;

6) the district prohibits gaining unauthorized access to others' files, or vandalizing the data of another user; forging electronic mail messages, or using an account owned by another user;

7) the district prohibits posting anonymous messages.

*            *            *

Consequences of violations include but are not limited to:

   * Suspension of Internet access;

   * Revocation of Internet access;

   * Suspension of computer access;

   * Revocation of computer access;

   * School suspension;

   * School expulsion;

   * Legal action and prosecution by the authorities.

The district makes no warranties with respect to Internet access; it specifically assumes no responsibilities for:

   1) the content of any advice or information received by a student from a source outside the district, or any costs or charges incurred as a result of seeing or accepting such advice;

   2) any costs, liability or damages caused by the way the student chooses to use his/her internet access.


While the district supports the idea of privacy of electronic information gathering, the district recognizes the need for a high degree of supervision and reserves the right to inspect student files without notice.


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Gene Kronback, School Board President


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Loy Woelber, Superintendent


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Date

**Appendix B**

Internet Safety Policy

The policy of Westbrook Walnut Grove Schools, Independent School District #2898, is to protect our children from web-based hate, violence, pornography, and other widely considered antisocial material, and so establishes an Internet Safety Policy.

      1) the district operates and will continue to operate internet filtering hardware (currently the WatchGuard system);

      2) the district will supervise student access to the internet;

      3) the district will make clear to students the acceptable use (see the acceptable use policy) of our network and equipment by a) providing a yearly briefing to the students that reviews the acceptable use policy, b) posting the policy in the areas where students may have access, and c) posting the policy on our local website.

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Gene Kronback, School Board President

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Loy Woelber, Superintendent

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Date