

# Technology Plan 2013-2015

Southwest MN Christian  
High School

Edgerton, MN

## **School Background**

When Dutch–American settlers came to southwest Minnesota in the 1890’s, they brought the traditions of the Dutch Reformation with them. One of these traditions was educating their children in religiously based day schools. Southwest Minnesota Christian High School helps young minds learn the eternal truths of the Christian faith and prepares them to use that faith in an ever–changing world.

## **Demographics**

Southwest Minnesota Christian High School (SWMCHS) in Edgerton, MN began in 1951 and now has 125 students in grades 9–12. These students represent 110 families. These families represent 18 different churches from 7 denominations. These students mostly come from rural towns within a 40–mile radius of Edgerton. Most of our students come from feeder schools in Edgerton, Leota, Chandler, Hills and Worthington.

Due to decreasing population in rural areas, our enrollment continues to decline. This decline in enrollment seriously affects our financial situation, which impacts the ability to implement some of the technologies that schools in larger areas may afford.

## **Technology Committee**

Leadership/Steering Committee

Principal – Paul Bootsma

Media Specialist and Technology Coordinator – Debbie Swier

Teacher – Jim Mische

This committee works with the school board executive committee in setting goals and strategies for technology at SWMCHS. This committee is made up of the principal, four school board members and one parent.

The Technology Committee will

- review the previous technology plan and develop the new plan
- assess the needs of staff and students regarding technology
- integrate the school mission statement with our strategies
- oversee the implementation of the Technology Plan
- evaluate the progress of the Technology Plan

## **Technology Vision Statement**

- A. Provide a Christ–centered, Bible–based quality education for distinctive Christian living. This includes equipping students with a knowledge base and the skills, capabilities and confidence to face new challenges. One area requiring this is technology. SWMCHS graduates will be lifelong learners, capable

- of using technology to help equip them for critical thinking, moral reasoning, problem solving, and service to others.
- B. SWMCHS staff will use technology to expand the “toolbox” of teaching methods in their fields, to communicate their subject matter effectively, and to prepare their students for a smooth transition into the world of higher education and work.
  - C. Students will
    - a. use the Internet to enhance classroom instruction
    - b. identify and use information sources available in school and in the world
    - c. apply critical thinking and communication skills
  - D. Life-long learners will have access to a technology environment that will allow them to develop their potential for leadership and to live God glorifying lives in a complex and changing society.

### **Objectives and Strategies**

- Students will use computer technology to access, retrieve, evaluate, interpret and present information
- The Technology Coordinator will maintain hardware and software that is in use by teachers in their specific disciplines.
- The Media Center and the Computer Lab will accommodate applications that require up to 33 students working on computers at the same time.
- The school network will be used to store teacher files.
- The Technology Coordinator will maintain the server and keep the operating system updated
- The InstaGate firewall will be used to filter all Internet traffic for the safety of students, school records and financial information.
- The Internet will be used to accommodate effective communication between home and school i.e.: Google Apps for Education, online grades, newsletters, activity schedules, interactive messaging.
- The school web site will disseminate information to the public including schedules, newsletters, financial information, contact information, and general information about the school
- Teacher in-services will be given in order to keep teachers updated on improvements made to the web site tools.

### **Needs Assessment**

In order for teachers to adequately prepare students with the tools they need for a future in the world of technology, we must prepare our teachers and provide them with the equipment they need for teaching. Our committee will evaluate needs on a continuous basis, however we also want input from teachers as to what they use, how effectively they use it, and what they need to be more effective. To that end we will

annually conduct a survey as to what teachers use and how and what they need.

After verbal polling of Administration, we find our telecommunication services are adequate for the needs of SWMCHS. We maintain a 2-line telecommunication system. We have telephone bases located in the Principal's Office, Secretary's Office, Conference Room, Counselor's Office, Activity Director's Office, Development Director's Office, Media Center, Kitchen, and 2 hallway locations. We have 2 remote units connected to this system. We also have a cell phone that can be used by authorized personnel.

Southwest MN Christian High School has a computer in every classroom. Our computers to student ratio of 1:3 are excellent. (See Appendix A for computer inventory) All computers in the school are Apple products. Computers are not more than 5 years old. The Principal, Activities Director and Technology Coordinator each have a laptop computer as do 5 teachers. We have a computer lab that provides 25 desktop computers. Our media center consists of a 6000-volume library as well as 8 desktop computers. The Library circulation software is working well. The software installed on all computers is adequate and we try to accommodate teachers who wish to integrate specific software into their classroom experience whenever possible. In some cases we are restricted by availability and/or cost. All computers can print to 2 laser printers located throughout the school. The entire school is on a network and all stations have access to the Internet. Students have access to most of the computers in the school provided they abide by the rules and use the computers and the network responsibly.

The Resource Room provides computers for individual students with special needs and disabilities. These computers are equipped with headphones and Universal Access software as well as all the software used on main stream computers.

We have a slide projector, ceiling mounted LCD projectors in all classrooms; four of those classrooms are also equipped with VHS and DVD players and a sound system. We have two media carts each with an LCD projector, a lap top computer, a VCR player, a DVD player and a sound system. We also have 3 media carts each with a large screen TV, a VCR and a DVD player. Every classroom is wired to cable TV as well. Students also have access to 3 digital still cameras and 2 digital video cameras for special projects.

As a result of the online survey we conducted with the teaching staff, (see Appendix B for survey) our committee has determined:

- the speed of our present wireless network is too slow to meet the needs of a classroom full of students all accessing the Internet wirelessly at the same time.
- there is a desire by teachers for “Smart Board” type technology, and better email communication system with students
- teachers need instruction to review on board software – most specifically presentation software

## **Policies and Procedures**

- A. Administrative Support
  - a. To facilitate the use of technology
  - b. To provide access for teachers and students
  - c. To facilitate equipment acquisition and installation.
  - d. To supply the application for technology
  - e. To make sure equipment is maintained
  - f. To oversee the implementation of the Internet Safety Procedures including firewall, content filter, and client monitoring.
  - g. To insure that every student understands the acceptable use information and procure a signed Internet Use contract.
- B. School Board – provide funding and vision for the use of technology in the instructional program. This would provide guidance to the technology committee’s formulation of a technology plan that will be shared with the staff and public.
- C. Curriculum plan – develop ways of implementing technology in each discipline of the curriculum
- D. Acceptable Use – We restrict internet access to material we believe to be obscene or harmful. The computer lab and Media Center are always under the supervision of a teacher or the media specialist. We will employ the use of filters and remote access to restrict illegal and illicit use of the Internet and the LAN. (See Appendix B for Acceptable Use Contract)
- E. Disaster Recovery – All essential material will be backed up on an external drive to be stored at least 30 feet from the server.
- F. Policy Review
  - a. Staff will be given opportunity to express needs for technology
  - b. Technology committee will review and prioritize requests
  - c. Principal will make final decisions

## **Technology Operations Management**

- A. Security
  - a. InstaGate Firewall will continue to filter all Internet traffic.
  - b. Technology Coordinator will monitor clients for compliance to user agreements.
- B. Disaster recovery
  - a. Technology Coordinator will back up essential material weekly on an external drive that will be stored at least 30 feet from the server.
- C. Technology Coordinator will
  - a. be available to assist staff and students when needed.
  - b. do on site maintenance of computers and network components
  - c. research, order and deploy technology equipment and software as directed by the Technology Committee and Principal. In order to keep our computers from getting too far out of date we will replace no less than 5 computers in the computer lab each year.
- D. Support - when the technology coordinator is unable to provide maintenance and/or repair, Mac Doctor's in Sioux Falls, SD will be called.

## **Media Center**

The Media Center is the hub of student research. The library contains an inventory of 6000+ books, 24 VHS and DVD titles, subscriptions to 24 magazines, 3 daily newspapers and 3 weekly newspapers. The library will supply books and periodicals to assist student research in all disciplines. Inventory will be examined each year to determine which materials must be eliminated and the Media Specialist will query teachers for input on books and periodicals to add to the collection. Computers will also be available to students for online research.

The Media Specialist will monitor the inventory and keep all items in good repair. She will discard items and order new materials as needed. She will also train students and teachers on library and computer use as needed. Teachers assigned to the Media Center each period of the day will be trained to enable them to also assist students in accessing needed materials.

## **Budget for Technology**

Annually

Hardware	5,000.00
Maintenance	1,000.00
Software/Supplies	1,000.00
Technology Coord.	17,500.00
Facilities	2,000.00
Internet Access	1,000.00
Staff Development	400.00
	27,900.00

## **Implementation Plan**

- A. Our committee will evaluate needs on a continuous basis, however we also want input from teachers as to what they use, how effectively they use it, and what they need to be more effective. To that end we will annually conduct a survey as to what teachers use and how and what they need.
- B. Encourage teachers to integrate technology into the curriculum in every discipline. They can use the Internet, digital encyclopedias, presentation software and hardware and other assistive technologies.
- C. Integrate appropriate technologies into classroom instruction in order to improve teaching and learning; possible iOS devices ie: iPad
  - i. 2013 – Do research into these devices; evaluate the cost and the need.
  - ii. 2014 – Present the findings to this committee and make a recommendation to the School Board.
  - iii. If the technology is approved it will be funded by grant sources.
- D. 2013 – upgrade wireless system including hardware
- E. 2013 – replace 5 machines in the Computer Lab
- F. 2014 – upgrade XServe or replace it
- G. 2014 – begin use of mobile technology if so directed by School Board
- H. 2014 – replace 5 machines in the Computer Lab
- I. 2015 – replace 2 oldest components of wireless network
- J. 2015 – replace 5 machines in the Computer Lab
- K. Continue the contract with JMC Inc. in order to maintain digital grading and online grade access to students and parents.
- L. Continue the school web site subscription with Faithwebsites.com.

- M. Continue to encourage and educate teachers to use the Faculty Web Site creation tools available to them in order to keep students and parents informed.
- N. Annual teacher in-services will be given in order to keep teachers updated on improvements made to the web site tools and/or significant upgrades to computer software.

Each year the technology committee will meet to review progress of 2010-2012 technology plan using the following format.

2010 objectives	2011 objectives	2012 objectives
a) make a recommendation to the School Board re: purchase of Smart Board technology b) purchase 5 new computers that use wireless technology	a) purchase Smart Board or Promethean technology if so directed by School Board b) purchase 5 new computers that use wireless technology c) provide teacher in-service on new Smart Board technology if purchased	a) make recommendation re: interactive smart board technology (this objective was made as a plan to increase smart boards slowly) b) Deploy school wide communication system c) Replace 2 switches with 10/100/1000 models d) Replace 5 machines in the Computer Lab
2010 current position evaluation a) wireless network is too slow, reverted back to Ethernet wherever possible b) 4 3M interactive whiteboards shows that they are not popular with teachers, too quirky and unreliable c) purchased 5 new wireless desktop computers	2011 current position a) School Board did not recommend purchase of Smart Boards, teachers are happy with ceiling mounted projectors b) purchased 9 new wireless desktop computers	2012 current position a) As School Board did not recommend purchase of Smart Boards, this objective is not necessary b) School Enrolled in Google Apps for Education in 2011. Google Apps for Education includes intra-school communication apps. c) Switches failed and were replaced in 2010 d)

Each year the technology committee will meet to review progress of 2013 – 2015 technology plan using the following format.

2013 objectives	2014 objectives	2015 objectives
a) research the use of iPad or similar mobile technology to replace desktop computers and make recommendation to School Board b) make recommendation for improving wireless system and deploy improvements c) replace 5 computer lab machines d) provide teacher inservice on updates to operating system on new computers	a) upgrade or replace X Serve b) implement School Board decision re: iOS devices (iPad or similar mobile technology) to replace desktop computers c) replace 5 computer lab machines	a) replace 2 oldest components of wireless network b) replace 5 computer lab machines
2013 current position evaluation	2014 current position evaluation	2015 current position evaluation

## Computer Inventory 2010-2011

Model	Location	Computer Name	Serial Number	Size/Speed	OS	Date
iMac Intel	Principal Office	Principal		1GB/160/1.83GHz	10.6.4	2007
MacBook Intel Alum	Principal	PrincipalMacBook		2GB/160/2GHz	10.6.6	2008
MacBook Intel	United Chr Schools	swmchmobile2		512MB/1.83GHz	10.4.6	2006
iMac Intel	Office	OfficeiMac09		1GB/250GB/2.16GHz	10.5.8	2006
eMac 3	Board Room	Board Room		256MB/800MHz	10.4.11	2003
eMac G4	Vanderaa's Office	Counselor 2		256/40MB/800MHz	10.4.10	2003
eMacG4	Bible	Office		256MB/700MHz	10.3.9	2003
eMac G4	Art Room	Art		256/40MB/800MHz	10.4.11	2003
eMac G4	Music Office	Music		256MB/800Mhz	10.4.11	2003
MacBook Intel	K. Dekens	MacBook7		1GB/250GB/2GHz	10.5.8	2008
iMac G5	Broekhuis	MathiMac		1.5/160GB/1.9GHz	10.4.11	2007
eMac G4	Busker	History		256/40MB/800MHz	10.4.11	2003
iMac Intel	Resource-Teacher	Resource iMac		1.25/160/1.83GHz	10.5.7	2008
eMac G4	Resource-Student	Resource A		256/40MB/800MHz	10.4.11	2003
eMac 3	Resource-Student	Resource B		256MB/800MHz	10.4.11	2003
	Science	ScienceClassroom				
eMac G4	Hrbek	SpanishiMac		256/40MB/800MHz	10.4.11	2003
MacBook Intel	Hrbek	MacBook6		1GB/250GB/2GHz	10.5.8	2008
eMac 14	kitchen	kitchen		256MB/1GHz	10.4.11	2004
eMac G4	Activities Dir. Office	ADeMac06				2004
MacBook 08	Activities Dir.				10.5	2008
MacBook Pro	Tech Coord	Tech Admin's Computer		2 GB/2.2 GHz	10.4.11	2007
eMac G4	Library Desk	Library Desk		512MB/1.42GHz	10.4.11	2005
eMac G4	Media Center 1	Media 1		512MB/1GHZ	10.4.11	2005
eMac G4	Media Center 2	Media 2		256/40MB/800MHz	10.4.11	2003
eMac G4	Media Center 3	Media3		256MB/1.25GHZ	10.4.11	2005
eMac G4	Media Center 4	Media 4		256/40MB/800MHz	10.4.11	2003
eMac G4	Media Center 5	Media 5		256/40MB/800MHz	10.4.11	2003
eMac G4	Media Center 6	Media 6		256/40MB/800MHz	10.4.11	2003
eMac G4	Media Center 7	Media 7		256/40MB/800MHz	10.4.11	2003
eMac G4	Media Center 8	Media 8		256/40MB/800MHz	10.4.11	2003

Model	Location	Computer Name	Serial Number	Size/Speed	OS	Date
iMac Intel	Lab R1S1	R1S1iMac		1GB/2GHz/240GB	10.6.4	2007
iMac Intel	Lab R1S2	R1S2iMac08		512MB/1.83GHz	10.6.4	2008
iMac Intel	Lab R1S3	R1S3iMacS		1GB/160/2.2GHz	10.6.4	2010
iMac 20	Lab R1S4	R1S4iMac		2GB/2GHz/220GB	10.6.4	2007
iMac Intel	Lab R2S1	R2S1iMac		2 GB/1.83GHz/160GB	10.6.4	2007
iMac Intel	Lab R2S2	R2S2iMacS		1GB/160/2.2GHz	10.6.4	2010
iMac Intel	Lab R2S3	R2S3iMacS		1GB/160/2.2GHz	10.6.4	2010
iMac 20	Lab R2S4	R2S4iMac		2GB/2GHz/220GB	10.6.4	2007
iMac Intel	Lab 42S5	R2S5iMac09		2/160GB/2GHz	10.6.4	2007
iMac 20	Lab R2S6	R2S6iMac		2GB/2GHz/220GB	10.6.4	2007
iMac 20	Lab R2S7	R2S7iMac		2GB/2GHz/220GB	10.6.4	2007
iMac Intel	Lab R3S1	R3S1iMac08		512MB/1.83GHz	10.6.4	2008
iMac Intel	Lab R3S2	R3S2iMac08		512MB/1.83GHz	10.6.4	2008
iMac 20	Lab R3S3	R3S3iMac		2GB/2GHz/220GB	10.6.4	2007
iMac Intel	Lab R3S4	R3S4iMac08		512MB/1.83GHz	10.6.4	2008
iMac Intel	Lab R3S5	R3S5iMac		2GB/1.83GHz/160GB	10.6.4	2006
iMac 20	Lab R3S6	R3S6iMac		2GB/2GHz/220GB	10.6.4	2007
iMac 20	Lab R3S7	R3S7iMac		2GB/2GHz/220GB	10.6.4	2007
iMac Intel	Lab R4S1	R4S1iMacS		1GB/160/2.2GHz	10.6.4	2007
iMac Intel	Lab R4S2	R4S2iMac08		512MB/1.83GHz	10.6.4	2010
iMac 20	Lab R4S3	R4S3iMac		2GB/2GHz/220GB	10.6.4	2007
iMac Intel	Lab R4S4	R4S4iMacS		1GB/160/2.2GHz	10.6.4	2010
iMac 20	Lab R4S5	R4S5iMac		2GB/2GHz/220GB	10.6.4	2007
iMac 20	Lab R4S6	R4S6 iMac		2GB/2GHz/220GB	10.6.4	2007
iMac Intel	Lab R4S7	R4S4iMacS		1GB/160/2.2GHz	10.6.4	2010
xServe	Server Room	SWMCH Server		4 GB/2 x 2.66 GHz	10.4.11	2007
eMac G4	Study Cart 1	Cart 1		256MB/1.25GHz	10.4.11	2005
eMac G4	Study Cart 2	Cart 2		256MB/1.25GHz	10.4.11	2006
iBook G4	Projector Cart W	swchmobile1		512MB/40GB/1GHz	10.3.9	2004
macBook CD	Projector Cart B	admobile		512MB/1.83GHz	10.4.7	2006

**School Network and Internet Rules:**

Students are responsible for good behavior on the school computer network just as they are in a classroom or a school hallway. Communications on the network are often public in nature. General school rules apply for behavior and communications apply.

The network is provided for students to conduct research and communicate with others. Access to network services is given to students who agree to act in a considerate and responsible manner. Parent permission is required. Access is a privilege – not a right. We expect students to use technology with discernment and integrity.

Network storage areas may be treated like school lockers. Network administrators may and will review files and communications to maintain system integrity and insure that users are using the system responsibly. Users should not expect that files stored on the server would always be private. Within reason, freedom of speech and access to information will be honored.

Students will be given a password that is to be kept confidential at all times. Any student who feels their password has been violated must contact the technology coordinator immediately. Anytime a student's work appears to have been copied from the network files, both the student whose work was copied and the student who copied the work will be prosecuted according to the general rules of cheating.

Student use of the Internet will be available only under teacher direction. The Internet will be available during school hours.

- Students are not allowed to use chat rooms, e-mail, or instant message communications.
- Unauthorized use of copyrighted material is prohibited.
- Students should not intentionally access inappropriate websites
- Sending or displaying offensive messages or pictures is prohibited.
- Harassing, insulting, or attacking others must be avoided.
- No one should use another's password.
- Students should not trespass into another's folder, work, or file.
- Do not intentionally waste limited resources such as time, paper, or printer ink.
- Threatening or obscene material is prohibited.
- Distribution of material protected by trade secret is prohibited.
- Vandalism is prohibited and is defined as any malicious attempt to harm or destroy data of another user, Internet, or networks that are connected to the Internet. This includes the uploading or creating of computer viruses.
- The network may not be used for commercial purposes.

Violations will be dealt with using a three-strike system:

- 1<sup>st</sup> – student will have no computer access for 1 week.
- 2<sup>nd</sup> – student will have no computer access for 6 weeks.
- 3<sup>rd</sup> – student will have no computer access for the remainder of the school year.

Violations may also result in grade reduction as well as other disciplinary or legal action.

*Return this portion to Southwest Minnesota Christian High*

## **User Agreement and Parent Permission Form**

As a user of the Southwest Minnesota Christian High School computer network, I hereby agree to comply with the previously stated rules – communicating over the network in a reliable and trustworthy fashion while honoring all relevant laws and restrictions.

Student Signature \_\_\_\_\_

As the parent or legal guardian of the minor student signing above, I grant permission for my son or daughter to access networked computer services such as electronic mail and the Internet. I understand that individuals and families may be held liable for violations. I understand that some materials on the Internet may be objectionable, but I accept the responsibility for guidance of Internet use – setting and conveying standards for my daughter or son to follow when selecting, sharing or exploring information and media.

Parent/Guardian  
Signature \_\_\_\_\_

Name of Student \_\_\_\_\_

Grade \_\_\_\_\_ Birthdate \_\_\_\_\_

Home Telephone \_\_\_\_\_

# **Internet Permission Form**

## **Southwest Minnesota Christian High School**

Proclaiming that Jesus Christ is Lord of all, the community of Southwest Minnesota Christian High School provides a Biblically based education to guide young people toward their goal to grow in wisdom and stature, and their commitment to serve both God and neighbor in all aspects of life.

We are pleased to offer Southwest Minnesota Christian High School students access to the computer network for the Internet. To gain access to the Internet, all students under the age of 19 must obtain parental permission and must sign and return this form to the Technology Coordinator. Students over 19 may sign their own forms.

Access to the Internet will enable students to explore thousands of libraries, databases, and bulletin boards. Student access to and use of the Internet will be available under teacher direction during school hours only. All student activity on the network and the Internet will be monitored.

Southwest Minnesota Christian High School has taken the best available precautions to restrict access to controversial materials. We have an Internet content filter protecting every station on the network. During the school day, teachers are available to guide students toward the use of appropriate materials. Nonetheless, families should be warned that some material accessible via the Internet may contain items that are illegal, defamatory, inaccurate or potentially offensive to some people. While our intent is to make Internet access available to further educational goals and objectives, students may find ways to access other materials as well.

We believe that the benefits to students from access to the Internet, in the form of information resources and opportunities for collaboration, exceed any disadvantages. But ultimately, it is the responsibility of parents and guardians to teach discernment and to set standards that their children should follow when using media and information sources. To that end, Southwest Christian High School supports and respects each family's right to decide whether or not to apply for access.

## ***Retain this half for your records***

### **School Network and Internet Rules**

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The network is provided for students to conduct research and communicate with others. Access to network services is given to students who agree to act in a considerate and responsible manner. Parent permission is required. Access is a privilege – not a right. We expect our students to use technology with discernment and integrity.

Network storage areas may be treated like school lockers. **Network administrators may review files and communications** to maintain system integrity and insure that users are using the system responsibly. Users should not expect that files stored on the network server would always be private. Within reason, freedom of speech and access to information will be honored.

Students will be given a password that is to be kept confidential at all times. Any student who feels their password has been violated must contact the Technology Coordinator immediately. Anytime a student's work appears to have been copied from the network files, both the student whose work was copied and the student who copied the work will be prosecuted according to the general rules of cheating.

The following are not permitted:

- Intentionally accessing inappropriate web sites
- Sending or displaying offensive messages or pictures
- Using obscene language
- Harassing, insulting or attacking others
- Damaging computers, computer systems or computer networks
- Violating copyright laws
- Using another's password
- Trespassing in another's folders, work or files
- Intentionally wasting limited resources
- Employing the network for commercial purposes
- Unauthorized personal e-mail or Instant Message type communications

Violations will be dealt with using the three-strike method:

1st violation = student will have no access to computers for 1 week

2<sup>nd</sup> violation = student will have no access to computers for 6 weeks

3<sup>rd</sup> violation = student will have no access to computers for remainder of school year

Violations may also result in grade reduction as well as other disciplinary or legal action.