Technology Plan Cover Sheet

2016-2018 (July 1, 2015 – June 30, 2018)

Organization Information

District/Agency/School (legal name): Lake Crystal Wellcome Memorial Schools

District Number: 2071

Technology Plan Status

The District/Agency/School has an approved 2013-15 technology plan:

X Yes No

2016-2018 Technology Plan Date of Creation: April 20, 2015

Identified Official with Authority
Name: Tom Farrell
Title: Superintendent
Address: PO Box 160, 607 Knights Lane, Lake Crystal, MN 56055
Phone: 507.726.2323
E-mail: tfarrell@isd2071.k12.mn.us

Technology Contact
Name: Bill Ries
Title: Technology Director
Address: PO Box 160, 607 Knights Lane, Lake Crystal, MN 56055
Phone: 507.726.2323
E-mail: bries@isd2071.k12.mn.us

2016-18 Technology Plan

TECHNOLOGY NEEDS ASSESSMENT. Describe the processes(s) used to determine the technology needs for the LEA for 2016-2018 and briefly summarize the needs that have been determined. Make sure to include any technology needs that will be supported through E-rate discounts, such as telephone, telecommunications access, Internet, and other E-rate eligible services:

Needs Assessment

1. Method: Completion of a survey to the elementary and secondary staff in 2015. The survey covered a range of technology skills. Participants were able to use narrative indicators to assess their level of skill and knowledge within each area. See Appendix A.
2. Key Results: See Appendix B.

Our staff is most comfortable in the areas of:

- Basic computer operation
- File management
- Graphics and digital image use
- Network and Internet use
- Student assessment
- Modification of instructional delivery
- Professional growth and communication
- Email
- The World Wide Web
- Search tools

They are least proficient in the use of:

- Database use
- Newsgroups
- Using technology to improve writing skills
- Individualization of instruction and education
- Fostering home/school communication
- Netiquette, online ethics and current issues

Significant positive change in the use of:

- Spreadsheet use
- Web page construction
- Search tools

Assessment of student performance
Information literacy skills
Student assessment
Network and internet use
PowerPoint presentation use
Graphics and digital image use

3. Participants: 47 responses total. 25 Elementary and 27 Secondary. Some staff work in both buildings.
4. Involvement: The technology plan and survey was revised by our Technology Committee to make it appropriate to our needs. It has been used in previous tech plans in 2007 and 2011.

GOALS AND STRATEGIES. List the specific goals and strategies for 2016-2015 that address how your LEA will use technology to deliver education and assist with school administration:

Mission and Vision Statement

The Mission of District 2071 is Educating for Tomorrow's World. Our mission for the Knights Digital Learning Initiative is that technology will be routine, transparent and integrated to support the curriculum goals and will enhance student achievement.

The Vision of District 2071 LCWM will achieve its mission by developing the unique capabilities of every learner, remaining focused on the future, using technology and promoting innovation, achieving excellence and celebrating diversity.

Vision for Technology:

Our vision for the Knights Digital Learning Initiative is that it will be student centered, utilizing a digital learning initiative that engages and prepares students for success in college, career and/or community involvement. This vision will be realized by:

1. Creating multimedia capabilities in all classroom and work stations
2. Training of personnel to improve computer literacy
3. Continue with plan to repair, replace, and upgrade technology equipment
4. Supplementing the delivery of education programs utilizing technology
5. Purchasing equipment to enable staff to integrate technology in curricular areas
6. Integration of the appropriate technology into each area of the curriculum
7. Providing improved communication and information access to the community
8. Training staff to regularly assess students' math and reading skills through online assessments

What is a digital learning initiative?

The passage of the 2013 10-year Capital Levy for Technology will allow for the creation of an instructional model that utilizes mobile technology devices for every student at designated grade levels commonly referred to as a digital learning initiative.

Why we are implementing the Knights Digital Learning Initiative?

1. A digital learning program provides students with opportunities to develop skills focusing emerging digital tools they will need to be successful in college, career and/or community.
2. Utilizing a digital learning program will enhance learning experiences, increase student engagement, empower students to become self-motivated learners and foster students' positive digital citizenship skills.
3. A digital learning program provides an opportunity for timely feedback/interaction between students and teachers that are necessary for rigorous learning experiences.
4. In digital learning programs, teachers will more effectively facilitate learning through the use and access to new and multiple ways of assessing student understanding.
5. A digital learning program enables educators to more effectively engage different types of learners because the resources for creating, synthesizing, researching, writing, presenting, and publishing are in the hands of the learner.

What we envision as an outcome from the Knights Digital Learning Initiative?

1. We believe that students' academic achievement will improve and that we will experience trends where students outperform themselves and past students on daily classwork, course grades, and college and work readiness assessments.
2. We expect that digital resources and materials will begin to replace traditional, paper-based, instructional materials.
3. We expect that teachers will participate in meaningful professional development to improve their knowledge and proficiency integrating technology into their curriculum and instruction.
4. We believe that students will show improvement in many areas, including arts, academics and athletics.

How we will implement the Knights Digital Learning Initiative?

1. We will create a systemic plan to ensure that the Knights Digital learning Initiative is viable, sustainable, and is not device specific.
2. We will create a systemic plan that addresses the leadership, curriculum, professional development, assessment, infrastructure and support, stakeholders, financial sustainability, and a process for managing complex change.

3. With the passage of the 10-year Capital Levy for Technology, we will create an implementation timeline that went into effect during the 2013-14 academic year that did provide mobile devices for staff and mobile device carts for students in grades PreK-12. Beginning with the 2014-15 academic year we provided 1-1 mobile devices for students in grades 9-12 and access to mobile device carts/docks for students in grades PreK-8. Beginning with the 2015-16 academic year we will provide 1-1 mobile devices for students in grades 7-12 and access to mobile device carts/docks for students in grades PreK-6. With passage of a levy in the fall of 2014 we will expand and build our wireless network and technology infrastructure to be capable of supporting the increased level demands of a mobile digital learning program in conjunction with expansion of the Secondary and Elementary buildings..

Why we will utilize mobile device docks for students in grades PreK-6?

1. At the elementary level, good instruction is a balance of large group and small group instruction.
2. A mobile device dock model will be used for students in grades PreK-6 for small group instruction to reinforce concepts and individual practice.
3. As students get older, collaboration between students increases and a mobile device dock model in each classroom which will provide opportunities for students to collaborate and publish information using digital tools.
4. Presently, our textbooks are hard copies. As our digital world evolves, we anticipate a growing need for students to access digital curriculum.

Why we will utilize 1-to-1 mobile devices for students in grades 7-12?

1. Individual devices at the high school level provide each student with a personal learning tool that can be adapted to various courses and learning experiences.
2. By implementing a 1-to-1 mobile device model at the high school level, students will benefit from having a “one stop shop” for curriculum materials and school management tools eg. digital workflow platforms, calendar/planners.
3. The phased-in implementation of 1-to-1 mobile devices will begin the process of each content area moving towards the adoption and implementation of digital curriculum.

4. The 1-to-1 mobile device model will result in system-wide implementation of digital work between students and teachers, which is quickly becoming the norm within high schools, colleges, and in the business world.

Specific Objectives and Strategies for Technology

1. The learner will understand important issues for a technology-based society and will exhibit ethical behavior in use of the computer and other technology
2. The learner will demonstrate knowledge and skills in use of the computer and other technologies.
3. The learner will use a variety of technologies to access, analyze, interpret, synthesize, apply, and communicate information.

Technology Strategies to Meet the Minnesota Academic Standards

Our students are provided with resources and are trained in strategies using technology, which ensure their success in meeting Minnesota's Academic Standards. These include:

1. 1:1 iPads
2. Research papers
3. Computer labs
4. Internet usage
5. Digital curriculum resources

Access to Courses Delivered Online or Through Distance Learning

1. Courses available to high school students
   College credit through Minnesota State University – Marshall and the University of Minnesota - 8
   College credit options for a total of 28 college credits
   High School credits - 108
2. Courses available to staff and community members-through community education
   Project SOCRATES
   Career classes
   Online classes

Data Driven Decision Making

1. Scores from the NWEA were used to show growth over time.
2. State Assessments OPLA, MCA
3. Staff will be surveyed to determine the appropriate changes needed to improve our Technology Plan.
4. The Renaissance Reading program is used by our elementary teachers to help students set and achieve goals for reading.
5. The STAR assessment uses data to determine our students' reading levels.
6. Staff development decisions for technology training are data-driven.
7. NWEA (computerized assessments)
8. Infinite Campus (web-based Student Information System)
9. Viewpoint (data warehouse)
10. IXL Math
11. Google Apps

Preparing teachers for the Knights Digital Learning Initiative

1. We will expand our professional development opportunities and support for technology integration to assist teachers as they transform their instruction and move beyond merely using digital tools as substitutes for traditional methods.
2. Job-embedded professional development and support for teachers will focus on technology integration and utilizing mobile devices for student learning.
3. Using a Train the trainer model, facilitators will provide support throughout the school year, as well as during the summer months.
4. Technology training and a technology coach/integrationist will ensure teachers have opportunities to develop the skills and confidence to use mobile devices and other technology they need to integrate these tools into their curriculum and instruction. Professional conferences that focus on instructional technology, such as the annual TIES Conference, school site visits, conferences and workshops will provide opportunities for teachers to collaboratively explore best practice strategies in the classroom.
5. Elementary and secondary staff will continue to use SIS portal to communicate with students and parents/guardians and Teachers are encouraged to have a web page on

the school's web site with their class's information, such as a syllabus, assignments, relevant links to other web sites, etc.
6. Elementary and secondary staffs are required to take attendance and report grades electronically through the SIS application, Infinite Campus. They have been introduced to creating their own web pages and encouraged to continue their development.

Preparing students and parents for the Knights Digital Learning Initiative

1. On-site orientation sessions will be provided to instruct students and parents in the basic operation, care and maintenance of student mobile devices, and inform them about the tenets of proper digital citizenship.
2. Video and print-based tutorials for using mobile devices, learning management systems, and Internet-based tools will be created to assist students and parents in their use of student mobile devices for academic achievement.

Communicating to stakeholders about the Knights Digital Learning Initiative

1. We will create a communication plan to ensure our vision and purpose for the Knights Digital Learning Initiative is communicated clearly and accurately.
2. We will promote our vision and plans for the Knights Digital Learning Initiative in the school district newsletter, on the school district website, through social media, and regional media outlets.
3. We will schedule presentations to parents, school groups, as well as business and community groups to promote the vision and plans for the Knights Digital Learning Initiative.

Measuring the impact of the Knights Digital Learning Initiative

1. We will conduct pre-and-post teacher assessments to ensure technology integration proficiency.
2. We will conduct stakeholder surveys on the use and impact of technology on student learning.
3. We will track student achievement using local indicators, standardized test data, and college and work readiness assessment data.

Increase/Improve Technology Access

1. Increased bandwidth for district.
2. Continued upgrading of computer labs
3. Wired/wireless networking
4. New projectors
5. Interactive whiteboards.

Use of Technology for Communication with Parents and Community

Programs in place include:

1. Email between staff,students and parents
2. Grading and homework
3. Foreign travel programs provides daily updates to families of the traveling students
4. District Web Site and Parent Portal
5. Telephone
6. Cell Phones
7. Teacher-developed web pages and web sites
8. Infinite Campus
9. Schoology

Additional Strategies

1. Computerized sports statistics
2. Fundraising results placed on spreadsheets
3. Online payment processing for Community Education classes, activity fees and lunch programs.
4. Community Education classes in basic computer skills, such as Internet use, word processing, spreadsheet, Internet search, email, etc.

Policies and Procedures

1. Equitable Access for Students and Library Customers with Exceptional Needs
The majority of computers are Windows-based with assistive technology built-in. Accessibility functions are a part of the operating system, including programs such as a Text-to-Speech, Magnifier, a Narrator and an On-Screen Keyboard. For individuals with visual or auditory difficulties and impairments, Dynavox and tablets. The iPads in

use within the district have built in accessibility features such as voice over, dictation, zoom, Braille, font and color adjustments etc.

2. Data and Network Security

Computers are installed with antivirus and antispyware software and are updated automatically to prevent viruses, worms, and other security risks. Operating system updates are also updated automatically, except in labs where computers are re-imaged and updated as needed during the year. For additional protection, our computers are protected by a firewall with private IP addresses that are not accessible by outside computers. The district's firewall which included bandwidth management and application prioritization should help to ensure network speed and efficiency are maintained. Harmful websites are also blocked by the district's filtering software. With the upcoming 2015-2016 school year, the district's bandwidth will be increased from 150 meg to 1 gig.

Internet Safety and Children's Internet Protection Act Compliance (CIPA)

The district complies with the Internet Safety and Children's Internet Protection Act by requiring all computers and users to access the Internet through filtering software. The district has also developed and adopted an Acceptable Computer/Internet Usage Policy. See Appendix C.

Key components include

1. Use of system as a privilege
2. Unacceptable uses defined
3. Internet filtering
4. Consistent with other school policies
5. Limited expectation of privacy
6. Internet use agreement
7. Limitation on school district liability
8. Parental responsibility and notification of student Internet use

Technology Infrastructure, Management, and Support

1. Telecommunications Capacity

Internet capacity is currently 150 MB, but will be upgraded to 1 GB.

Intranet (WAN) capacity is 1 GB over leased fiber between buildings.

2. Equipment Access for Instruction

Secondary School (Computers with Internet access)

1. Three labs and one media center – 97 desktops
2. Classrooms – 78 desktops/laptops

Elementary School (Computers with Internet access)

1. One media center and one computer lab – 55 computers
2. Classrooms – 74 computers

3. Equipment Access for Delivery of Public Library Services

The card catalogs at both the elementary and secondary libraries are web accessible via the district's web site.

4. Average Age of Equipment

Desktops/Laptops

Elementary

Total Number of desktops/laptops =133

Average Age of Ownership (actual age > years of ownership) = 3.8

Secondary

Total Number of desktops/laptops =175

Average Age of Ownership (actual age > years of ownership) = 3.2

Tablets

Elementary

Total number of tablets=239

Average Age of Ownership =1.5

Secondary

Total number of tablets=348

Average Age of Ownership =1.3

Interactive Whiteboards

Elementary

Total number of whiteboards = 29

Average Age of Ownership = 3.3

Secondary

Total number of whiteboards = 7

Average Age of Ownership = 3.4

Projectors

Elementary

Total number of projectors = 36

Average Age of Ownership = 3.5

Secondary

Total number of projectors = 23

Average Age of Ownership = 7.0

1. Replacement Schedule

The replacement goal is a computer cycle of 6 years and a tablet cycle of 5 years. Replacing approximately 45-50 computers and 150 tablets each year.

2.. Technology Platform

Computers are Microsoft Windows PCs. Tablets are Apple iPads.

Technology Staff Support

One full-time tech director and a .2 tech assistant with selected teachers to provide additional support.

Role of School Media Center/Library and Public Library

1. Role in Supporting Instruction

There is a District Library Media Director split between the elementary school and the secondary school. The District Library Media Director plays a critical role in the instructional program by:

A. Working as a partner with classroom teachers to plan, design, deliver, and evaluate instruction through the use of a variety of resources and information problem-solving skills.

B. Managing a program (personnel, resources, facility, and service) through which students receive instruction and practice in the use of information.

C. Providing students with reading guidance, which enables them to locate appropriate resources for personal enrichment, as well as for information problem solving.

2. Teacher Assistance in Technology Integration: School media personnel with the support from the technology integrationist provide leadership, expertise, and advocacy in the use of technology resources for students and staff and in the integration of technology with instruction.

3. Technology Standards: District 2071 has adopted a curriculum for Library Media, technology standards for students, and a technology plan for teachers.

Library Media Core Curriculum

The LCWM Library Media Core Curriculum is divided into three strands:

Information Literacy - Information literacy is the ability to identify important problems, gather and critically evaluate relevant information from a variety of sources, use this information to resolve central issues, and then clearly communicate the solution to others.
Literature - The purpose of the literature strand is to enrich a student's life by encouraging reading for pleasure, enrichment, and information.
Media Literacy - The goal of the media literacy strand is for the student to make healthy and wise choices as a consumer of media.

Technology Standards for Students

There are three main technology objectives for students in grades K-12:

1. The learner will understand important issues of a technology-based society and will exhibit ethical behavior in use of the computer and other technology.
2. The learner will demonstrate knowledge and skills in use of the computer and other technology.
3. The learner will use a variety of technologies to access, analyze, interpret, synthesize, apply, and communicate information.

Technology Plan for Teachers:

Teachers completed a technology survey in the spring of 2015, the results of which led to the development of needs-based training opportunities. The District Library Media

Director has been and continues to be a member of the district and local technology committees and has been involved in the development of the media curriculum, technology standards, and the technology plan for teachers.

Partnerships: District 2071 is a member of SMILE/Minitex, the South-central Minnesota Interlibrary Exchange: SMILE/Minitex is a multi-type, multi-county library system, funded by the State of Minnesota, that offers support services to libraries and information centers in the nine counties of south central Minnesota. SMILE/Minitex's mission is to encourage and facilitate cooperative activities among the more than 160 academic, public, school, and special libraries and information centers in the region, helping them to better serve their users.

PROFESSIONAL DEVELOPMENT PLAN. Describe the professional development strategies you have in place for 2016-2018 to ensure LEA staff are prepared to use the technology infrastructure, software programs, and online resources provided:

1. Staff Development Plan

Site staff development committees exist at both the elementary and secondary schools. Each committee is comprised of teachers and administrators and serves as planning and decision-making bodies for their respective buildings.

District Student Achievement Goal

- Expand professional development to support teacher professional development growth and goals.
- Align and update curriculum and standards to ensure students are provided with learning opportunities consistent with our mission.
- Enhance and improve practices that build and sustain a positive school climate.
- Improve the use and implementation of technology in all applicable curriculum areas.
- Explore forms of instruction technology and implement those that are appropriate.
- Provide opportunities and training for technology in the classrooms as needed and appropriate
- Expand knowledge of the use of assessment data.
- Explore and continue RTI intervention training.
- Ensure that RTI and other instructional strategies meet individual student needs.
- Ensure that instructional strategies meet individual student needs.
- Continue to improve student behavior management strategies school-wide.

2. Addressing Integration of Technology with Instruction

We will continue to improve our teachers' technology skills through numerous trainings. Training for staff has been developed from a survey completed in 2015 and is based on the needs of the individual learner. This has the specific intent of improving the achievement of our students within the classroom.

3. Process of Staff Assessment and Individualization

Elementary technology training was developed from a needs assessment of the staff and training sessions were prioritized on the identified needs.

Secondary training is offered in the same manner as that developed at the elementary school, i.e., staff are given a choice of which training sessions to attend based on their individualized needs. Sessions for different levels may run concurrently.

1. Each staff has completed a needs assessment yearly.
2. The needs assessment will continue to be administered on an annual basis to determine the level of growth, confidence, knowledge, and comfort with technology and its potential in the classroom.

Administrator's Training Level and Assessment

1. Administrators have been trained in the use of data driven decision making with data warehouse tools like Viewpoint.
2. Administrators have the opportunity to take part in same survey and training as staff.
3. Administrators have been in several leadership cohorts.
4. Infinite Campus (student information system)

Challenges to Staff Development Activities

1. Other district initiatives have taken priority time in staff training (i.e., Professional Learning Communities)
2. Decreasing funding at the local and state level have limited the resources needed for the implemented plans outlined in this technology plan.

Budget for Technology

	2015-16	2016-17	2017-18
Elementary Student iPads	$4,580	$8,244	$27,480
Secondary Student iPads	$55,418	$8,244	$37,556
Staff iPads	$13,282	$32,060	$3,664
iPad Management	$5,355	$6,579	$6,750
iPad Cases	$5,600	$2,450	$5,250
Apps	$3,200	$1,400	$3,000
Computers	$20,000	$20,000	$20,000
Phones	$ 0	$30,000	$ 0
Staff Support	$49,984	$58,668	$53,201
Internet*	$29,820	$29,820	$29,820
WAN*	$19,200	$19,200	$19,200

* = E-Rate Eligible Services

EVALUATION. Explain the evaluation process for your technology plan for 2016-2018, including timeline, roles and responsibilities, and information gathered to assess how the technology plan goals and strategies are being met:

Incorporated Measures of Performance

Each year, the Technology Committee will conduct a survey of staff members. In addition, questionnaires will be sent to parents and students every two years.

Using the results of this survey and questionnaire process, an evaluation of the technology plan is created (Appendix A). These survey and questionnaire tools are designed to be a comprehensive procedure that is not to be viewed as an evaluation, but as a means to ensure that district and building goals are being accomplished. The committee will benchmark the progress, or lack thereof, as the district moves forward with technology integration.

The appropriateness of the Technology Plan will be evaluated and maintained in the following ways:

1. Reassessment of Goals and Activities: In order to ensure that the Technology Plan reflects the District's current situation, the goals and activities will be reassessed.
2. Staff Development: We will reassess the progress of staff development with regard to faculty and student computer literacy by assessing staff proficiencies in the use of technology to improve communication and improve productivity using programs such as gradebook and attendance software.
3. Integration Assess the degree to which technology has been integrated into regular classroom practice by:
    a. Curriculum Support: incorporating technology throughout the curriculum to enhance the teaching of skills and concepts.
    b. Intervention and Remediation: using technology to develop or remediate specific skills, such as reading and math, to serve as a safety net for students who are not making progress in those skills.
    c. K-12 Proficiencies: teaching the life skills of technology to students, including the ability to use spreadsheets, presentation software, keyboarding, word processing, database, and Internet.
4. Annual Building Reports each building will provide the Technology Committee with an annual report on their technology use.

5. Review and Update Inventory of equipment and software.
6. Enhanced Communication Assess the degree to which technology has enhanced communication between the school and the community by collaboration building through the use of technology for consensus building and gathering input from various stakeholders, such as teachers, parents, and community members.
7. Revision and Development Assess the district's progress toward revising instructional guidelines, revising graduation requirements, and developing a district-wide technology plan.
8. Outstanding Programs Outstanding programs and uses of technology that already exist in the District will be identified with the intent of expanding their focus beyond their current setting.

Evaluation timeline

The committee will meet at least twice per year to review the plan and its progress.

OPTIONAL LINKS. Provide links to district strategic planning documents, survey instruments, policies, or other resources that were used to provide data and help prepare the technology plan:

- District Strategic Plan Document
    - http://www.isd2071.k12.mn.us/strategicplan
- District Policies
    - http://www.isd2071.k12.mn.us/policies
- Digital Learning Initiative
    - http://www.isd2071.k12.mn.us/dli

LINK TO CURRENT TECHNOLOGY PLAN. Provide the link on the LEA website where the technology plan will be posted and updated throughout the planning period:

The ISD 2071 Technology Plan may be found at

http://www.isd2071.k12.mn.us/techplan

CHILDREN'S INTERNET PROTECTION ACT (CIPA)

This LEA has an Internet Safety/Acceptable Use Policy in place.

Yes **X** No

If yes, please provide a link to access the policy at the LEA website.

http://www.isd2071.k12.mn.us/policies (#524)

This school district deploys an Internet filter to protect minors from material that is pornographic or otherwise harmful to them.

Yes **X** No