Evaluation Plan Phase 2: Max Hodgen, Darren Swenson, Anne Elisa Brown, Don Strand

Purpose of Evaluation:

The effective use of technology is an integral component aiding the Madison School District in fulfilling its mission of assisting students in reaching their potential as lifelong learners. The purpose of this evaluation is to examine the effects technology has had on Madison's mission statement and provide guidance moving forward. Specifically, the evaluation process will focus on technology use in the classroom, ongoing professional development needs, and impact on student learning.

Evaluation Audience:

The audience of this evaluation will be made up of the Madison School District administration, the Madison School Board, the individual educators, students, parents, and Madison community members. Each group has its own interest in seeing that the technology plan is effective and efficient. Each group will also have specific questions and concerns they would like to see addressed by the evaluation. These specific questions and concerns will help the groups understand where we are at, where we should be and also what is in the future with education and technology. Secondary audiences include: Partners at DSU, the SD State Office of Technology and Assessment.

Description of the Evaluand:

Madison Central School District 39-2 is located in Lake County, South Dakota. The city of Madison has a population of around 6300 people. Madison also is home to one of the most technical universities in the Midwest, Dakota State University. The student body of the district ranges in age from kindergarten to grade 12 (K-12). The student population consists of 1158 students. The ethnicity of the student population is as follows: 1063 white, 35 Hispanic, 22 Indian, 15 African American, 11 Asian, 10 biracial, 2 Pacific Islander. Madison is the county seat of Lake County. The community of Madison is also home to some major attractions like Prairie Village, which is a living history museum created from turn-of-the-century buildings moved from around the state to create a community that never was. The Smith-Zimmerman Museum, located on the campus of Dakota State, allows people to explore Victorian furnishings in four period rooms along with early forms of transportation. The Dakota Prairie Playhouse and Conference Center is home for great entertainment for the Madison area from theater performances to music groups to speakers. Madison's general sales and gross receipts was $2,299,000, property tax was $1,087,000 and other license tax was $38,000

Infrastructure

The district is currently running XP and Windows 7. The district updates software when it becomes obsolete. The district is also currently running Office 2007, will look at 2010 or newer in the next couple years. After becoming a one to one school we limited the amount of installed software and moved more to web based items. We do buy individual licenses for Office in the district and currently have about 1000 licenses. We also have a site license for the high school

for Adobe CS3 Master Collection and SynchronEyes 7. Items such as routers, hubs, access points, battery backups and other network related items are purchased with district general and capital outlay funds. The firewall service is dependent on the State of South Dakota and the Department of BIT. When changes need to occur we are notified via the State and BIT, and we comply with their recommendations.ATM switches, Monitors, interactive televisions ITV, Video equipment, Video services, etc.).

High School Technology Infrastructure

Teachers – Fujitsu 4410 (35)

Freshmen – Dell 2100 netbook (100)

Sophomores – Gateway m285 (300)

Para Professionals – Gateway m285/295 (5)

Offices – Dell t1500 (6)

Lunch – Gateway m405 (4)

Misc. Desktops (lunch, custodian)

6 Kyocera Printers

3 HP printers

3 kyocera copiers

Every room has a Epson 1705c Projector

Cisco Wireless AP's (30)

4 Physical Servers

10 Virtual Servers

Cisco Wireless Lan Controller

HP Procurve Gigabit Switches

Middle School Technology Infrastructure

Teachers – Fujitsu 4410 (30)

2 Mobile Carts of 27 Dell 2100 Netbooks

1 mobile Cart of 27 HP 5101 Netbooks

Lab of 25 HP Desktops

Lab of 30 HP and Gateway Desktops

Lab of 12 Dell Desktops

Lab of 12 Fujitsu T1010/12 Gateway m285

Lab of 10 Gateway m405's

8 Kyocera Printers

2 Kyocera Colored Printers

1 Kyocera Copy machines

DVR with 12 Security Cameras

Secondary Domain Controller

HP procurve switches

3 HP printers

Para professionals – m285/m285 (5)

Every room has a epson 1705c projector / 3 rooms have Epson 85+ projectors

Technology Goals and Professional Development (PD):

Utilize technology in order to improve formative assessment and teacher effectiveness

o PD: Train all staff on using Achievement Series;

o Train all elementary and middle school staff on using writing to learn;

o Integrate the use of ActivExpressions in grades k – 8

Provide educators with educational opportunities to research, analyze, and implement technology in order to improve academic achievement.

o PD: Provide summer opportunities for teachers

o Attend conferences

o Yearly technology symposium

o Middle school staff will be involved with training on technology and 21st Century skills

Utilize technology to enhance the curriculum and instruction

o PD: Provide after school training across the district

o Sessions for technology based on integration and 21st Century Skills

Increase supplemental activities in the classroom and professional development through the use of distance learning and DDN

o PD: Increase teacher professional development activities through the teleconferencing system

Increase investment in K-12 technology to increase access and utilization for all students and teachers.

Increase links between parents, community, businesses, and the school district to encourage understanding and partnership.

o PD: Hold trainings for teachers to update their sites.

Guiding Evaluation Questions:

1. How is technology used to promote authentic learning and critical thinking in students?

2. What are the teachers' biggest professional development needs? Are those needs being met? How?

3. Are graduating students technologically prepared to succeed in their undergraduate studies?

4. What percentage of graduating students pursues technology related degrees?

5. How does technology impact student learning and teacher productivity?

 6. How does the use of technology impact the communication between the teachers and students, and the teachers and parents?

7. Does the district have the correct technology available for meeting district goals?

8. Is the current hardware and school website meeting the needs of students, faculty, administration, and community?
More than being interested in the web site, we're interested in the policies that encourage appropriate web site/wide area access use. Similarly, we're interested in the policies the guide the acquisition of educational software in the school.

Description of the Evaluation Approach:

The evaluation will be a formal evaluation of the plan. It will initially be an internal evaluation done by members of the faculty who work with the technology plan. The evaluation will gather feedback on areas of the plan which are undergoing review and revision. Interviews/surveys with faculty, staff, and students will take place in order to provide an objective view of areas of interest to the evaluation. Data will also be gathered to address the various evaluation questions and issues. This internal review will be formative in nature. Once the internal phase of the evaluation is complete, the external phase of evaluation will take place. This external phase of the evaluation will be summative. The external review will address concerns of bias on the part of the internal evaluators.

Evaluation Information Collection and Analysis

In order to evaluate the district technology plan, various steps must be taken. Evolution questions must be made to target specific outcomes, the information needed to supply the answers to the evaluation questions must be identified and a plan must be put into place to collect the information and analyze the information. The following table illustrates each of the steps necessary to complete the technology evaluation. Good.

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Evaluation Questions	Why the Question is Important	Information Needed to Answer the Question	When and How the Information Will Be Collected	Data Analysis and Interpretation Procedures
How is technology used to promote authentic learning and critical thinking in students?	We agree that critical thinking skills are fostered through authentic learning. It is important to evaluate how the district's technology promotes authentic learning.	We need to know the amount of technology inclusion teachers are implementing into their instruction. We need to know the types of assessments teachers are using with their students.	At the May in-service, teachers will provide outlined lesson plans detailing activities and assessments. Teachers will complete the Technology Use and Services Teacher Survey. (see appendix)

Direct observation results from the principal's evaluations of teachers. | Create Frequency Tables to organize the types of activities/assessments and how often specific activities/assessments take place and then display those graphically using Histograms. Good. But you may need to fill out this section a little bit by discussing the specific nature of data analysis—something like: "data collected from survey questions will be reduced to item mean scores and standard deviations. Items will be ranked in terms of respondent strength. Comparison will be made in repeated sue of the survey . . .". |
| What are the teachers' biggest professional development needs? Are those being met? How? | To promote authentic learning and critical thinking skills, teachers should be trained using the best practices and latest technology skills. | We need the teachers' judgments regarding their strengths and weakness of applying technology into the curriculum. | At the May in-service teachers will complete the following Professional Development Rubric: http://dese.mo.gov/divteachqual /leadership/pd_guidelines/appendH.pdf

(see appendix) | Survey results will provide a list of the teachers perceived PD needs. Data analysis can then compare past results |

				of PD needs to assess progress.

Phase 2

Evaluation Questions	Why the Question is Important	Information Needed to Answer the Question	When and How the Information Will Be Collected	Data Analysis and Interpretation Procedures
Are graduating students technologically prepared to succeed in their undergraduate studies?	Students need to be prepared to handle the technology requirements of their undergraduate courses.	We need to know what the typical technology requirements are for undergraduate programs in the area.	Gather local universities' technology prerequisites.	Compare the curriculum maps and standards of Madison's technology curriculum and the results from question #1 with the survey results and prerequisites from the local universities.
What percentage of graduating students pursues technology related degrees?	We need to be concerned with how technology applications are being promoted and encouraged.	We need to poll recent alumni and gather data from the guidance counselors to find out what percentage of our graduates pursue a technology related degree.	Counselors will provide data on what fields of study graduating seniors plan to pursue. The Madison Alumni Foundation will provide info as to what major field of study alumni have pursued in college.	Create a data base of past alumni using the survey information. Use social media applications to update in the future.

Phase 2

Evaluation Questions	Why the Question is Important	Information Needed to Answer the Question	When and How the Information Will Be Collected	Data Analysis and Interpretation Procedures
How does technology impact student learning?	We need to determine if the technology impact has positively affected student productivity.	Test scores and alternative assessments from years when technology was not used and current test scores and alternative assessments which reflect technology use.	Quantitative test results from: Dakota Step Test, ACT, Achievement Series I know that using standardized testing data as an indicator of technology's value is a big step to make. However, you did right to include it as student achievement data is some of the most consistent and compelling data that we have—and to be able to link it to technology investments would be significant. Qualitative assessments from: Student portfolios, Project Based Learning	Use Excel to organize the scores and calculate the means and standard deviation spreads from year to year. Create inventories of the qualitative assessments. What type of qualitative assessments are you looking at? How will you assess impact and document change?
How does the use of technology impact the communication between the teachers and students? ...the teachers and parents?	Has technology promoted meaningful collaboration and communication between parents, students, and educators?	Which forms of communication are being utilized between teachers and students, and teachers and parents? How is this communication impacted by technology? How can we improve the impact that technology has on communication?	The students, teachers, and parents will be asked to fill out an attitude scale to assess their attitudes about their current communication methods. The results will be gathered and assessed at the end of the year.	The means for each question on the attitude survey will be organized and compiled using Excel. Communication strengths and weakness can then be identified.

Phase 2

Evaluation Questions	Why the Question is Important	Information Needed to Answer the Question	When and How the Information Will Be Collected	Data Analysis and Interpretation Procedures
Does the district have the correct technology available for meeting district goals?	It is difficult to meet the other components of the evaluation plan if the hardware and software aren't available	Input and output devices Network speed and connectivity Ongoing Funding Technical support system and maintenance Data support systems	Technology Essential Conditions Rubric (TECR) (see appendix)	Compare the rubric with the acceptable educational standards of: speed/connectivity, support, network design, input/output devices, and funding.
Is the current hardware and school website meeting the needs of students, faculty, administration, and community?	The hardware and website used by the district must be appropriate in order for the district to reach its technology goals.	We need to know how accessible and navigable the website is. We need to know that the hardware is meeting the needs of both students and faculty.	Web Site Evaluation Rubric (see appendix)	Use Excel to organize and calculate the means of the four critical areas of: Design, Content, Technical Elements, & Credibility of the Web Site Evaluation Rubric.

Reporting the Evaluation Results

As technology increasingly becomes a vital part of our education system, evaluations must be in place to ensure that the technology used in school districts is both aligned with state content and technology standards and fulfills a specific educational need. Evaluators will need to gather necessary data from a variety of sources in order to conclusively analyze the technology infrastructure of the district. This data must be shared with stakeholders such as staff, students, administrators, technology coordinators and school board members as it becomes available to ensure that the stakeholders understand the importance of this information. Reporting the findings at each level of evaluation give the final plan credibility and meaning. Efficiently evaluating technology needs and uses will ensure that future technology purchases are justified, equitable, and the maximum potential is reached for both educators and students. Once the data has been analyzed, a plan will be formed for the district. This plan will assist the district in: maximizing student achievement, aligning their current technology with state content and technology standards, evaluating the needs of educators regarding professional development, giving the community the opportunity to participate in the educational process, and helping to ensure that future technology purchases are relevant to the needs of graduating students. Since you mentioned the evaluation will be formative and internal in the top part of your plan, how often do you see "reporting" taking place. Anually? If so, I don't think that fits the profile of being a formative evaluation approach. I would think that evaluation information needs to be cycled to the technology committee perhaps on a monthly or quarterly basis in small increments. And, what is the format for the evaluation reports? Oral briefs? Written briefs? Longer year ending reports? It seems to me that there might be a couple of different formats for these reports.

This action plan will be presented to teachers and administrators during an in-service. Once the faculty members are familiar with the findings of the evaluation, they can use the action plan as a reference to help plan for technology within the curriculum. The plan will also be published to the district website for reference by the community, students, parents, and other stakeholders.

Team;

You have a very good plan here. You have addressed many concerns key to the development of a sound and sophisticated technology program. One strength I can see is in the comprehensive look you take at the technology program the district. Youalso have a nice array of tools and information appended below to help you gather data and organize it. All items appended do a good job at getting you information you need.

Another strength is the close links the plan has for formative evaluation. Make sure you emphasize that part of the plan so that administrators and others who review it see that the evaluation has utility from the start.

I also appreciate in the plan is some very nice and clean writing.

Though your data analysis section has some significant improvement from the draft versions of the plan. Some effort is required to hone your skills in identifying data collection methods and then describing them appropriately. It would probably include detailing analysis methods for survey research and interview and observation data. So that last cell on each of your evaluation question could use a bit more description of data collection and analysis procedures.

I am still concerned about the heavy dependency on survey methods. But I realize what an efficient data collection approach it is. Remember, survey data is volunteer data and it comes with all the risks the self-report data is famous for. See if you can work in some more interview, observation and artifact data.

A good effort and a nice plan. You should definitely put this to work in Madison some way. It may not be in the exact form that this evaluation plan details, but there are many parts of the is evaluation plan that can be used, while others can be adapted for use in the district. Also, don't forget to tweak the plan a little bit and then include it as a part of your portfolio so we can see it when you exit the program. ~mark 91/100

Appendix:

Technology Use and Services Teacher Survey

Madison Central School District

The purpose of this survey is to find out how you feel about the use of technology in your classes, technology support services, and the possible impact technology has on your students. Your responses to the questions below will help us better determine how we can support teaching and learning in the district. The survey will take about 10 minutes of your time. Your responses are confidential.

1. To what <u>extent</u> have the following types of educational technologies been incorporated into your class(es)?

	Not at all	Slightly	Moderately	A Lot
a. Overhead transparencies	❑	❑	❑	❑
b. In-class audio or video clips	❑	❑	❑	❑
c. Outside-of-class audio or video clips	❑	❑	❑	❑
d. In-class multimedia/computer-based presentation	❑	❑	❑	❑
e. Outside-of-class multimedia/computer-based presentation	❑	❑	❑	❑
f. Email	❑	❑	❑	❑
g. Online syllabi or other learning resources	❑	❑	❑	❑
h. Listserves/message boards/bulletin boards	❑	❑	❑	❑
i. Drill and practice software programs	❑	❑	❑	❑
j. Internet-based research	❑	❑	❑	❑
k. Online testing	❑	❑	❑	❑
l. Other (please name):	❑	❑	❑	❑
m. Other (please name):	❑	❑	❑	❑

2. How <u>proficient</u> are you at using the following computing applications and technologies

		Not at all	Slightly	Moderately	A Lot
a.	Email	☐	☐	☐	☐
b.	Word processing	☐	☐	☐	☐
c.	Spreadsheets (e.g., Excel)	☐	☐	☐	☐
d.	Multimedia/graphics (Adobe Illustrator, Quark, Inspiration, Photoshop, etc.)	☐	☐	☐	☐
e.	Online communication tools (chats, discussion boards, etc.)	☐	☐	☐	☐
f.	Internet navigation, search, and settings	☐	☐	☐	☐
g.	Computer-based tutorials/simulations	☐	☐	☐	☐
h.	DDN Video Conferencing	☐	☐	☐	☐
i.	Other:	☐	☐	☐	☐

3. Please indicate the extent to which you agree or disagree with the following statements

		Disagree	Somewhat Disagree	Agree	S
a.	I and my students have sufficient access to technology at school to complete their assigned work	☐	☐	☐	
b.	My students are proficient at the technologies I have required them to use (software and hardware)	☐	☐	☐	
c.	There are sufficient opportunities afforded me by the district to improve my technology use and application skills	☐	☐	☐	
d.	The technology we have is well cared for and working properly when I need it.	☐	☐	☐	
e.	School administrators encourage and support the use of educational technologies to support student learning	☐	☐	☐	
f.	The technology support team is responsive to my needs	☐	☐	☐	

What suggestions do you have for improving the technology resources and support in your building?

4. In your class(es), what learning outcomes do you feel are supported—at least in part—by technology?

	Disagree	Somewhat Disagree	Agree	S
a. Technology supports collaborative student learning	❏	❏	❏	
b. Technology helps bring "real world" and authentic learning experiences into the classroom	❏	❏	❏	
c. There are sufficient opportunities afforded me by the district to improve my technology use and application skills	❏	❏	❏	
d. The technology we have is well cared for and up-to-date	❏	❏	❏	
e. School administrators encourage and support the use of educational technologies to support student learning	❏	❏	❏	

Please provide a specific example of a learning outcome or impact that you have observed is a result of technology integration in the classroom.

List any future topics you would like as in-service sessions.

Professional Development Rubric: The Missouri Professional Development Guidelines for Student Success

http://dese.mo.gov/divteachqual/leadership/pd_guidelines/appendH.pdf

Courtesy of: Guskey and Roy

Web Sites Evaluation

developed by Tammy Payton
Return to [Evaluation Design] [Teaching Resources] [West Home Page]

Name of Site _____ Date _____

URL: _____ Time _____ a.m./p.m.

1 = Poor 5 =Exceptional

Design

   Navigability is good. Links are clearly labeled.
          Can move from page to page easily. 1   2   3   4   5

     This site offers interactivity. The visitor
               engages with the site. 1   2   3   4   5

      This site uses appropriate page format.
           Pages are not inordinately long. 1   2   3   4   5

             Can easily find information. 1   2   3   4   5

      This site is aesthetically appealing.
          Good use of graphics and color. 1   2   3   4   5

      This site is aesthetically courteous.
     Text and background colors do not clash. 1   2   3   4   5

Content

Has a proper title. 1   2   3   4   5

Additional resource links are included. 1   2   3   4   5

Information is useful. 1   2   3   4   5

Rich content and will likely be revisited. 1   2   3   4   5

How this website compares in content to
similar websites. 1   2   3   4   5

Technical Elements

All links work. 1   2   3   4   5

Thumbnail graphics used. Graphics download quickly. 1   2   3   4   5

Alternative text page is offered when heavy
graphics or frames are used. 1   2   3   4   5

Image links and image maps have a text alternative. 1   2   3   4   5

Can see meaningful information within 30 seconds. 1   2   3   4   5

Credibility

Contact person is stated with their e-mail address. 1   2   3   4   5

Announces when this page was last updated.
Links have been kept current. 1   2   3   4   5

Resource links used to develop content are included. 1   2   3   4   5

States the name of the host school or institution. 1   2   3   4   5

Total Possible Points = 100

Retrieved from: http://www.siec.k12.in.us/west/online/eval.htm

TECHNOLOGY ESSENTIAL CONDITIONS RUBRIC (TECR)

	Technology Capacity, Equity & Access to Support Teaching & Learning		
Key Areas	**Stage 1** *Beginning*	**Stage 2** Progressing	**Stage 3** Proficient
Student Access to Technology	Student access to technology varies by group and from class to class. Adaptive technology is not available to meet the special needs of students with disabilities. Students do not have access to computers before or after school.	Students have access to technology stations in most classrooms or in labs as scheduled by their teachers. Adaptive technology is available in some classrooms or media center. All students have open access to computers before or after school 1-5 hours per week.	Every student has access to technology at any time on an as-needed basis, regardless of their race, gender, socioeconomic status, or scholastic abilities. Adaptive technology is available in all classrooms, as needed. All students have open access to computers before or after school more than 5 hours per week.
Teacher/Education Leader/Staff Access to Technology	Teachers/educational leaders/staff share access to technology for research and productivity use.	Most teachers/educational leaders/staff have adequate access to technology for research, productivity use, and presentations.	All teachers/educational leaders/staff have access to technology at any time on an as-needed basis.
Aligned Curriculum-based Tools and Online Resources	Teachers have limited access to some instructional equipment (e.g., televisions, VCR's, digital cameras, scanners, handhelds, graphing calculators). Tool-based software is limited to word processing and spreadsheets.	Shared use of instructional equipment is available among groups of teachers. Tool-based software includes productivity, presentation, graphics and concept mapping. Instructional equipment is assigned to each teacher/classroom including at least a computer with projection device, TV, VCR, or DVD.	All classrooms are fully equipped with technological infrastructure to enhance student learning and address multiple learning styles, including software, digital cameras, scanners, handhelds, or other devices specific to content areas. Software and online resources are aligned to GLEs.
Network Capability/ Internet	Most rooms are connected to the LAN/WAN, which is a minimum 10/100 hubbed network. Basic filtering software is in use.	All rooms are connected to the LAN/WAN, which is a minimum 10/100 switched network. Filtering and virus protection software is in	Robust WAN with 100 MB/GB or fiber switched network allows the use of

Access/Video Capacity	Direct connectivity to the Internet is available at the school and accessible in some rooms. There is adequate distribution of bandwidth to the school to avoid most delays. Two-way video and audio is available in at least one classroom. Video is available in the classroom on magnetic or optical media. Media is available via classroom device such as VCR or DVD player.	use. There is adequate bandwidth to each classroom over the LAN to avoid most delays. There is capacity to schedule and distribute video over district or cable access network to the classroom. Two-way video and audio is available in more than one classroom. There is some flexibility with access to mobile lab or wireless computers.	resources such as video streaming or desktop conferencing. Infrastructure allows easy access to network resources for students and teachers including some wireless connectivity and remote access. Filtering, virus protection, and security measures, as well as disaster recovery plan is in place. Network-provided video is available on demand. Two-way video and audio in every student learning area provides access for all. Robust network allows interconnections with all other K-12 sites and post-secondary institutions.