

Lame Deer Public Schools Technology Plan

2012-2015

by the

Lame Deer Schools Technology Committee

Lame Deer Public Schools
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Mission

The Lame Deer School District and Technology Committee realize that as time changes, so must our approach to education. As technological advancements continue, we must evaluate these developments and implement those we feel have merit in our educational plan. Our objective is to find those pieces of technology that fit our long-term curricular goals to help us achieve our goals more effectively and efficiently. The staff of Lame Deer Public Schools will be prepared to integrate technology into the curriculum and cultural teachings to improve the quality of education and create an interactive learning environment that will enrich and empower each child toward becoming an independent and creative thinker and learner.

The Lame Deer Technology Committee believes that:

- Technology should be introduced and incorporated into the instructional process beginning as early as kindergarten. Use of technology should be taught and encouraged throughout each grade.
- Teachers need to develop their knowledge and skills in using the various technologies at their grade level as well as learning and implementing the district student information system (SIS).
- Teachers need assistance and modeling of integrated technology in all subject areas.
- Computers and other technological equipment in each classroom will be used as tools in our plan to meet curriculum standards.
- Use of a variety of technology for different instructional purposes will be planned and goals will be set to acquire the hardware and software to insure equitable access to technology by students and staff.

Along with using technologies as a learning tool, other goals will be established to direct the acquisition and use of technologies for the express purpose of:

- Developing basic skills for staff as well as students
- Developing problem solving strategies in students
- Aiding teachers in record keeping, research, and curriculum enrichment
- Instilling in students the motivation to be a lifelong learner and user of technology.

Technology Mission Statement

All students graduating from Lame Deer Public Schools will be technologically literate and successful, life-long learners.

Technology Committee Objectives

- **Professional Development:** All teachers will be able to use the technology and evaluate its effectiveness, thus resulting in improved instructional techniques and performance.
- **Assessment and Evaluation:** Facilitate the integration of technology into the curriculum and classroom in order to emphasize the teacher and student as collaborator, researcher, mentor, facilitator and life-long learner.
- **Curriculum Planning, Instruction and Evaluation:** Use technology to meet school improvement and reform goals (reading and mathematics) to meet the goals of *No Child Left Behind*.

Students' learning potential will be enhanced through continual curriculum development emphasizing the following: problem solving, critical thinking, and decision making skills.

Technology Vision

The Lame Deer School District knows that technology is an integral part of today's workforce. Therefore the **tools of technology** must serve as a fundamental element of the learning environment. This district is committed to promoting lifelong learning skills and developing productive members of society by using classroom technology for **instruction**, management, assessment, and communications. Technology will not only be considered a separate curriculum but will be integrated into every level of classroom instruction.

Lame Deer School District has accepted the responsibility of training students and educators in the use and operation of technology. We will provide members of our staff with a realistic understanding of the power and usefulness of technology in our changing society. To reach this goal, we have developed a comprehensive technology plan.

Internet access and training is a primary concern for administrators and office staff. Increasingly, the state and federal governments are moving from paper-based systems to electronic systems. One example is the Child Nutrition Program which reimburses the district for food commodities used in the cafeteria. Monthly reports are required and submitted electronically via the Internet. An additional benefit of such connectivity through the district is the Intranet. The district Intranet is used to provide timely information to students and teachers alike, for example, the use of electronic data collection and record-keeping increases productivity and efficiency.

Integrating computers into our curriculum to deliver instruction and change the focus of the classroom from the teacher to the learner. Specific plans for application in particular curriculum areas follow. These plans may be adapted or expanded as the technology is implemented and teachers are trained in the integration of technology.

Graduation Expectations

Students graduating from Lame Deer Schools will demonstrate:

- Communication Skills (i.e., writing, speaking, listening, and reading)
- Basic Math and Science Skills
- An Awareness of the Arts
- ***Technology Literacy***
- Life Skills (i.e., personal financial management, conflict resolution, and cultural ethics)
- Service Learning (i.e., community service and citizenship)
- School-to-Work Skills (i.e., career readiness, resume, and interview skills)

Credit Recovery

The NovaNet online courseware program will allow students who are behind in their studies to independently catch up with their peers in language arts.

English

1. Using word processing software, the areas of evaluating/revising and publishing will be easily adapted to a lab situation. Since this is how most professional writing is done, the experience would be more true-to-life for the students. For students with limited skills (i.e., poor spelling), word processing makes many aspects of the writing process much more accessible. The end result is higher performance. Upper level skills such as critical analysis will appear as a natural progression in their development as writers. Online searches are frequently used for research. SmartBoards and computers quite often to access dramatic stagings and readings of classic literature.

Social Studies

Students use the tools of technology to compare past and present historical events. An example of investigating the past would be to read historical documents that would be integrated into the subject presently studied. (i.e., The Magna Carta's relationship to the development of the Constitution.) The Internet could be partnered with traditional sources to complete such a project. To help students keep up to date, the Internet would be used to look at current events and breaking news events, the use of satellite technology would complement the traditional tools and the Internet resources.

Besides using the Internet, a variety of applications would be used. The world geography class might use an atlas app to learn location and facts of countries. American History students can locate and read the actual documents that are the cornerstone of our society. The government class would use apps to study Supreme Court cases and "How a Bill Becomes Law. This would integrate both passive and active learning, helping all styles of learners. *The lesson that must be taught, learned and demonstrated repeatedly is that the tools of technology do not replace the traditional methods of instruction; they enhance the learning process. ??(will someday soon replace traditional methods)* The outcome is the creation of reflective learners who have harnessed the process.

Math

The main emphasis of our program is both college prep and applications to real life. To achieve some of these goals, graphing calculators, programming, Global Positioning System, surveying, etc. will be used. To implement some of these plans, a computer lab with connection to the Internet is almost essential. Software used could include Carnegie Learning and spreadsheet applications. Students in the elementary school will use Harcourt Math and Star Math Assessment. Use of these software packages that require students to apply mathematical concepts will bring education to life. The actual software would be subject to the changes in the profession. Students should be aware that the skills learned in mathematics are applicable to other subject fields. This happens as a part of life-long learning.

Art

Graphics arts, the largest and most quickly growing area of employability in the arts, is a computer based industry. In order for students to function in a college graphics arts atmosphere or in the world of graphic art work, students must be comfortable and skilled with graphics arts programs.

Art appreciation and art history, two of the most important areas of art instruction, are generally unattractive to students and costly to implement. However, with the advent of new technologies, exciting programs are available on the Internet which allow students to "see" artwork from around the world without leaving their classrooms.

Special Education

Resource students generally need more time and practice on the computer to absorb the necessary skills. iPads assist as communication devices and for use in Speech/Language therapy services. Students with disabilities in the area of written language can use the computer for writing assignments. Math software such as Harcourt Math can be used to practice and reinforce basic math skills. ALS+ program can be used for students to work at an independent pace to achieve their learning goals. Computer life skills programs could be used for resource students who are in transition from school-to-work. When needed, adaptations such as keyboards, voice recognition, and magnified screens will be needed to match the challenges faced by the students. The addition of the SMART Boards has helped in lesson presentation and interactivity.

Business/Technology Education

The business curriculum has integrated computers into the curriculum for the past several years. However, to keep up with current technological advances and software upgrades, there must be a plan for the purchasing of these devices. Business curriculum changes every time new system software comes out or a new version of a software package is released.

As the globalization of our society continues to evolve, we must look at the international perspectives as they reflect our social, political, cultural, and economic realities. We must prepare our students with employability skills that also fit into this international perspective and which include academic skills, personal management skills, and teamwork skills.

Elementary

The elementary curriculum is currently undergoing changes. New textbook series offer instruction materials in CD-ROM format. Our classrooms possess the proper hardware to take advantage of this technology. Other areas that will be upgraded and integrate technology will be reading, English and math. The Lame Deer Elementary staff is committed to this plan for acquiring, networking, and training

to facilitate the educational opportunities of our students. The elementary has a complete computer lab, at least 3 student computers in every classroom, and extra computers in the library. They are currently using programs such as Harcourt Math, Web Achiever, typing programs, and Star Math assessment.

Library

The role of the library in the Lame Deer School District is to provide information and recreational reading needs of its patrons and technology has become an indispensable tool. The use of eReaders like Kindle Fire, Nook and iPads will be integrated with the print collection. There will be planned instruction time to teach students and staff to use technology for information retrieval. Among the online sources used for information are subscription databases, search engines/directories like Yahoo! and Google. Follett Circulation and Cataloging is used to catalogue and check the status on books and other materials checked out of the libraries. Students and faculty will then use technology i.e. Power Point, Word, digital cameras and camcorders, etc. to produce an end product. The library and its multiple resources should become an integrated part of each school day, and not a special once a week activity. Students and staff should be constantly aware of opportunities to learn at their library and using pertinent links on the school's homepage so they can help achieve that goal.

A future need for the district is a library website that will allow for the consolidation of collections in both schools, shared resources, and online capability to search for those resources.

In conclusion, for our students to become technologically literate, teachers must become technologically literate facilitators who prepare students to find information and solve problems and using all the technological resources the school has available. As the school moves toward helping students in this way, it will become the technological hub of the community. Community members will use their home computers to access their student progress by logging on the Lame Deer Schools web page and checking their student records through Infinite Campus, the Student Information System program.

With technology infused into the curricula, the Lame Deer Staff will be able to provide a broader array of learning opportunities. These opportunities will enforce the concepts of the learning process in order to produce lifelong learners. Lame Deer School District intends for the Technology Plan to help achieve the goals of the five year School Improvement Plan.

It is the job of the students, faculty, administration, parents, businesses and community members to work together to bring this, or a similar vision to pass. As we move toward this vision, Lame Deer Public Schools will be preparing the students to be successful in a global economy in the 21st century.

Needs Assessment & Inventory

Lame Deer School District is located in the southeastern portion of Montana and lies within the exterior boundaries of the Northern Cheyenne Reservation. Spanning nearly 450,000 acres, the reservation is 100 miles from Billings, Montana and 79 miles northeast of Sheridan, Wyoming. The Lame Deer Schools are located in the town of Lame Deer and serve the surrounding communities on the reservation of Birney, Ashland, and Busby. The major employers on the reservation are the tribal government, Federal Government, the school district, and the mining companies located 21 miles north of Lame Deer. The town contains a junior college, convenience store/gas station, a small grocery store, a video store, casino and restaurant, and a small fast food establishment. These businesses are quite small and are mainly tribally owned. The Lame Deer School District consists of three facilities that house

Kindergarten through 12th grade with a current enrollment of 539 students. Ninety-nine percent of the enrolled population is Native Americans, with eighty percent of the student population being identified by government guidelines as poverty stricken.

The Lame Deer Schools Technology Plan was first developed in the Spring of 2001 and is now in its seventh revision. It is linked to our district strategic plan and the K-12 School Improvement Plan. As staff members become more knowledgeable users of technology, it is our assumption that the technology skills of students will also increase as will overall technology use and integration into the curriculum and instruction.

Lame Deer School District has made major strides in the last eight years toward implementing their technology plan, however, the task is not complete. Our network is 100% complete. All classrooms have been wired for the Internet and most classrooms have at least three computers.

2012 Hardware Inventory

Hardware	Number	Computer Speed	Ram	Hard Drive
Servers	8	1.2-8Mhz	2GB-8 GB	80-360 GB
Desktops AMD 2X Dual Core &Pentium IV, Pentium D, Pentium Dual Core	363	1.2 Mhz-2.5 Mhz Dual Core	2-6 GB	120-700 GB
Laptops-PC	218	1.2-2.6 Mhz Dual Core	2-8GB	120-800 GB
Laptops-MAC	7	1.6GHZ Dual Core	2 GB	60 GB
IPAD	86			16-64 GB

Additional Hardware

Video Digital Camera (5)	Projectors (22) Smart Boards (38)	Fax Machine (6)	All-in-One Printers (6)	Digital Camera (8)	Scanners (8)
VCR's (12)	Printers: B & W Laser (50) Color Laser (14) Color Ink Jet (70)	Switches (25)	Wireless Routers- Access Points (11)	DVD Players (12)	Text Cameras (25)

School Improvement Model

Technology Integration

Performance Objective: 100% of the desired equipment/services will be acquired to facilitate the attainment of other objectives within the technology plan which further results in integration of technology.

Integration of technology into the curriculum is the major focus of the technology committee. Lame Deer Schools has developed standards across all curricular areas that are in alignment to the State and have been determined to meet or exceed the Montana standards. Technology will be **applied** and **infused** in a manner to assist students in achievement of these standards.

No Child Left Behind and the Montana Content and Performance Standards will be used as a model for our technology curriculum. The proposed plan develops an approach of on-going staff development, community-inclusion and training, curriculum development, and continued technology enhancement.

Flexible and appropriate staff development initiates the project by providing faculty the appropriate skills to begin integrating technology with actual classroom instruction. The technology department will individually counsel and plan with teachers to encourage effective instructional use of equipment.

The committee will continue to develop an incentive program for teachers. As teachers participate in progressive training and receive support on integrating hardware, software and telecommunications into standards based curriculum development and school reform, the incentives will be used to ensure ongoing and sustained professional development for teachers, administrators and library media personnel. The use of renewal units through the Office of Public Instruction, course credit through the University System, additional technology for individual classrooms and release time for training as well as developing technology integrated curriculum will be components of this plan.

The student-level outcome goals of this school reform project strive to increase learning, especially of advanced or higher-level skills, and to enhance student motivation and self-concept, which will increase high school graduation rates. The catalyst for this change is centering instruction around authentic, challenging tasks. **The Lame Deer School Improvement Strategic Education Plan will give students tasks that are personally meaningful and challenging to them.** The research task will be more complex than the task would be if assigned with a conventional instruction method and will be multi-disciplinary, based on engaged learning, authentic assessment and integration of technology across the curriculum.

With state of the art technology and software, our students' education will be supported in all areas of the curriculum and will meet all their varied interests and learning styles. **The Technology Committee sees technology as a tool, rather than a separate curriculum area.** Meeting high standards means helping all citizens to acquire the knowledge, skills, and habits of mind they will need to know what careers are available and how to attain the marketable skills for these new careers. Students

will be active, positive citizens in their own community and to begin thinking of themselves as part of a global community.

Key to the success of technology integration and school reform is staff development. The **Department of Education** has identified the following principles for effective professional development: <http://www.ed.gov/>

1. Focus on the teacher as central in school reform with an emphasis on both content and pedagogy; and an embodiment of good research and practice.
2. Professional development should be seen as a long-term commitment and should be embedded in the regular routine of the school.
3. Professional development should be sustained and intensive, in contrast to the superficial, one-shot training session that teachers too often receive.
4. Effective professional development helps teachers integrate technology into their regular instruction . It encourages teachers to view technology as a tool to improve all facets of their professional lives.
5. Professional development with and about technology is unlikely to have a sustained impact unless teachers have regular access to the technologies they are studying. Realistic, hands-on training with the hardware and software teachers will actually use, is most effective.
6. Professional development is more likely to be effective when the school culture values technology and when congruous changes are made in the school organization. This has to be long-term change, and it has to be something that's part of the natural basis of schools.
7. Teachers need ample time to engage in professional development, share ideas and practice and experiment with technology.

The above guidelines will continue to be the **focus** of the technology committee and the Lame Deer School District.

Professional Development

"The capacity of schools to provide [active, meaningful] learning experience to all of their students will require a tremendous investment. And the investment goes well beyond replacing outdated equipment with new hardware and software. What is involved here is.....a revolution in what teachers understand to be the methods and goals of instruction and the standards for student accomplishment.....the less visible and more intangible costs of developing expertise in teachers and providing them the opportunity to use that technology must also be estimated...these costs..may be greater in magnitude than the hardware/software costs." Henry Jay Becker, "A Truly Empowering Technology-Rich Education—How Much Will it Cost?" Educational IBM Quarterly, Vol. 3, No 1., Fall 1993.

GOAL: *Teachers will have the basic skills necessary to successfully use technology in their classrooms as an educational tool through continual professional development.*

Performance Standard: Eighty five percent of district teachers will rate themselves as a "3" or better as measured by the Teachers' Technology Use in Teaching and Learning section of the Taking a Good Look at Instructional Technology *(TAGLIT) by spring 2012.

Individual Development

In order to obtain the maximum benefit from the ongoing curricular development and technology integration and acquisition, the district is committed to providing training for staff, parents and community members.

- U **Staff** - For the staff, this training will include both initial development to provide familiarization with equipment and software, as well as ongoing development in technology uses and integration. Included in this training will be time set aside for practical use of the technologies. To assure adequate development for all personnel, there will be a needs assessment on an individual basis before advancing to additional topics.
- U **Parents** - As part of the district's policy to enhance the entire learning process for the students, parents will be encouraged to attend training sessions on the use of new technologies. Parents will then be better equipped to help their children learn. Technology projects will be developed that will allow the parents to cooperate with their children in completing these projects in return for the development they had been provided.
- U **Community members - (Adult Ed)** Members of the local community will also be invited to these no charge training sessions. This will allow them to have a better knowledge of the technologies that the school, and the students, are using. With this knowledge they will be able to help the students with various activities, including school to work, mentoring and involvement with the shared decision making for the entire school district.

The staff of Lame Deer Public Schools has access to various types of technology. All teachers in the district have a computer in their classroom and a laptop available for smart boards and projector equipment. Administrators and clerical support staff have computers on their desks, while other support staff have access to computers. Access to scanners, computer CD-ROM devices, projection devices, digital and video cameras, and other technology that the district currently owns is readily available for all administration and staff members.

However, several problems are evident. Some current staff members are not able to effectively develop and implement curriculum changes while performing the duties for which they are contracted; time restraints hinder current staff who seek to facilitate the implementation of technology; and technology is not being utilized in all areas of our curriculum.

The first survey the staff responded to was diagnostic needs assessment survey of individual competencies. Data from the Teachers Technology Skills Inventory indicates that 70% of the district teaching staff rated themselves as “novice” in the area of basic technology skills. The information will be analyzed by the technology committee to determine staff development. TAGLIT was taken in the fall of 2003 and again in November of 2006. It’s data will be used to plan for the development and implementation of an ongoing comprehensive training program for present and future technology needs including technical support. Teachers, administrators, and support staff will be sufficiently trained in the use of the technology that is available to them. After receiving training, sufficient time will be given for those who receive training to implement that training in whatever way is most appropriate.

Teachers need to receive special training on the integration of technology into their classrooms. Lame Deer teachers need and want professional development opportunities to help them acquire technological skills. They realize that when they effectively use technology as a tool, the educational opportunities of their students will be enhanced.

Training (2012-2015):

- Network and File Management
- Management Systems (District E-mail, Library Automation, Infinite Campus School usage and administration)
- Smartboard applications and training
- Classroom Internet Use
- Apple Hardware and Software usage
- IPAD applications for the classroom
- Presentation Software
- Classroom Technologies (smart boards, projection systems)
- Scanners, Digital Camera, Video Production
- Network Computer Based Math (Carnegie Learning and Harcourt Math)
- Credit Recovery (NovaNet)
- NWEA (MAP) Testing

Specific Content Areas

- Math
- Science
- English
- Social Studies
- Health/PE
- Electives

Interdisciplinary Applications

- Elementary Level
- Junior High
- High School Level

Process Orientation

- Inquiry/research Processes

Context Adaptations

- One-computer Classroom
- Media Center/Lab
- Other

Developmentally Appropriate Practices

- K-12 grade levels

Process to achieve the Mastery Level will include the following activities:

- < Current district personnel will provide training in areas where they have expertise.
- < Outside experts will provide training in those areas where there are no district experts.
- < Training will focus on how to implement technology as an educational tool.
- < Training will be provided whenever new software or equipment is purchased.
- < Building experts will be developed who are readily available to answer questions that arise as a result of technology implementation.
- < Monetary support will be provided to staff to acquire training in order to train other staff members.
- < Workshops will be available to staff and community members, covering designated software or hardware during the school year.

- < Early outs or release time will be used as a way to provide staff training.
- < Mini workshops will be held immediately after school for individual staff members who would like specific training.
- < Mini workshops during the school day for staff members will be conducted by the Technology Coordinator. These workshops would be in areas requested by the teacher and could be within the classroom or during preparation time.
- < Staff members will be encouraged to attend technology conferences in areas of individual interest.
- < Use no less than 1 and no more than 3 PIR days for technology training by outside professionals or the Technology Coordinator.
- < Substitutes will be hired to enable individual staff members to develop technology related curriculum.
- < District Titles I SIG and various grant funds will be used for staff technology training as appropriate.

Using rubrics such as those listed below will provide automatic goals for all professional development participants and offer a direction regarding professional growth and focus group discussions.

- ' Self Evaluation: Growing and Developing Professionally
- ' Technology Needs Assessments Survey
- ' Technology Self-Evaluation Survey
- ' Affective Evaluation
- ' Self Evaluation: Contributing to the School and District

Self-Evaluation
Professional Responsibilities
Growing and Developing Professionally

LEVEL OF PERFORMANCE

ELEMENT	Unsatisfactory	Basic	Proficient	Distinguished
Enhancement of Content Knowledge and Pedagogical Skill	Teacher engages in no professional development activities to enhance knowledge or skill	Teacher participates in professional activities to a limited extent when they are convenient	Teacher seeks out opportunities for professional development to enhance content knowledge and pedagogical skill	Teacher seeks out opportunities for professional development and makes a systematic attempt to conduct action research in his/her classroom.
Services to the Profession	Teacher makes no effort to share knowledge with others or to assume professional responsibilities	Teacher finds limited ways to contribute to the profession	Teacher participates actively in assisting other educators	Teacher initiates important activities to contribute to the profession, such as mentoring teachers, writing grants, leading workshops, making presentations

The following survey will be used to identify where our staff's affective and cognitive levels. It will also be used to plan staff development.

Lame Deer Public Schools

Technology Needs Assessment Survey

Name _____

Date _____

Grade _____

Position _____

Please complete each section of the survey checking the appropriate letter for your response to each item.

YOUR TECHNOLOGY BACKGROUND

Have you used the following technologies either at home or at work?

A = yes, frequently B = Yes, rarely C = no D = don't know

Item	Examples	A	B	C	D	E
1. PC Computer	Windows Environment					
2. Video Camcorder	Video Tape Recorder, player					
3. VCR						
4. DVD Player						
5. FAX Machine						
6. Advanced Copier						
7. Digital Camera						
8. LCD Panel or Computer Projector						
9. Internet Web Browser	Navigator, Internet Explorer, or AOL, etc.					
10. Search Engines	Yahoo, Bing, Google, etc.					
11. Modem						
12. CDR/RW-ROM						
13. Scanner						
14. Cable TV						
15. Document Camera						
16. Networks (File/Print Sharing)						
17. Other (Please List)						

STAFF CENTERED TECHNOLOGY

Have you used computer technology for the following for your job?

A = yes, frequently B = yes, rarely C = no D = don't know

Item	Example	A	B	C	D	E
19. Student Management	Grading, attendance, or assessment programs					

20. Student Information	Student records, discipline, or health systems						
21. School Management	Budget, personnel, or scheduling/calendar						
22. Word Processing	Word, Works, Word Perfect, ClarisWorks, etc.						
23. Spreadsheets	Excel, Works, Quattro Pro, etc.						
24. Databases	Access, Works, FoxPro, Filemaker						
25. Desktop Publishing	Pagemaker, Printshop Deluxe, etc.						
26. Authoring or Multimedia	Hyperstudio, Director						
27. Instructional Demonstration/Presentation	Powerpoint, Persuasion						
28. Information Retrieval	Infotrac, SIRS, Library Card Catalog, etc.						
29. Audio/Video Capture or Digitizing	Premiere, Videoshop						
30. Art/Graphic Development	Photoshop, Painter, Illustrator, Canvas						
31. Computerized Testing	Microtest, etc.						
32. Internet or Online Access	Navigator, Internet Explorer, AOL, etc.						
33. Webpage Development	FrontPage, HomePage, Pagemill, etc.						
34. E-mail	Eudora, Outlook, Exchange						
35. Other (Please List)							

STUDENT CENTERED TECHNOLOGY

In your classes, do your students use the following computer-aided instruction (CAI) tools/processes?

A = yes, frequently B = yes, rarely C = no D = don't know E = not applicable

Item	Example	A	B	C	D	E
36. CAI: drill and practice/tutorial						
37. CAI: simulation/educational games	Sim City, Sim Life, Civilization, etc.					
38. Word Processing	Word, Word Perfect, ClarisWorks, etc.					
39. Spreadsheets	Excel, Quattro Pro, etc.					
40. Databases	Access, FoxPro, Filemaker					
41. Desktop Publishing	Yearbook, journalism, newspaper					
42. Authoring or Multimedia	Hyperstudio, Director					
43. Electronic Presentation	Powerpoint, Persuasion					
44. Information Retrieval	Infotrac, SIRS, Library Card Catalog, etc.					
45. Video Development						
46. Problem Solving	Math Blaster, Oregon Trail, etc.					
47. Internet Access	Telecommunications, research, current events					
48. Webpage Development						
49. Other (Please List)						

Regarding the following technologies, how would you rate the impact or support on instruction?

A = high B = somewhat high C = somewhat low D = low E = don't know						
Item	Example	A	B	C	D	E
50. Individual Computer						
51. Open Lab						
52. Teleconferencing/Interactive Video	Interactive Teleconference Video					
53. Educational TV/Videotapes						
54. Internet Access						
55. Laserdisc/DVD Player						
56. Multimedia System/CD-ROM						
57. Electronic Library Access						
58. Electronic Chalkboard	Smartboard					
59. Voice Activation/Touch Screen						
60. Video Camcorder/Capture/Editing Equipment						
61. School/District E-mail						
62. Fax Machines						
63. High Quality Printing	Color/laser					
64. Web Server/Development Software						
65 Desktop Publishing Resources						
66 Scanners						
67 Digital Cameras						
68. Other (Please List)						

STAFF DEVELOPMENT ACTIVITIES

Identify the quantity of training you have received in each of the following areas. (In SD or on your own)

A = extensive B = lots C = some D = minimal E = none						
Item	Example	A	B	C	D	E
69. Advanced Input/Output Devices	Scanner, digital camera, etc.					
70. Telecommunications	E-mail, bulletin boards, internet access					
71. TV/Audio/Video	Satellite Cable TV, Laserdisc, VCR, etc.					
72. Word Processing	Letter, memos, tests, etc					
73. Spreadsheets						
74. DataBases						
75. Authoring/Multimedia Development						
76. Electronic Presentation	Powerpoint, Persuasion					

77. Networking/Network Management						
78. School Management	Budgets, scheduling, personnel					
79. Student Management	PowerSchool/Power Grade: Grading, attendance, student records					
80. Desktop Publishing	Brochures, pamphlets, posters, etc.					
81. Interactive Video						
82. Curriculum Specific Applications						
83. Basic Operating System Technique	Mac OS, Windows 3.1, Win '95, Win '98 Win 2K, Win XP					
84. CD-ROM/Multimedia Applications						
85. Electronic Research	Online, CD-ROM based, databases					
86. HTML/Web Page Development						
87. Troubleshooting						
88. Other (Please List)						

Identify the quantity of training you feel you need in each of the following areas.

		A = extensive	B = lots	C = some	D = minimal	E = none
Item	Example	A	B	C	D	E
89. Advanced Input/Output Devices	Scanner, digital camera, etc.					
90. Telecommunications	E-mail, bulletin boards, internet access					
91. TV/Audio/Video	Satellite/Cable TV, VCR, etc.					
92. Word Processing	Letter, memos, tests, etc.					
93. Spreadsheets						
94. DataBases						
95. Authoring/Multimedia/Presentation Development						
96. Networking/Network Management						
97. School Management	Budgets, scheduling, personnel					
98. Student Management	PowerSchool/Power GradeGrading, attendance, student records					
99. Desktop Publishing	Brochures, pamphlets, posters, etc.					
100. Interactive Video	Jason Project					
101. Curriculum Specific Applications	Accelerated Reader, Jason Project					
102. Basic Operating System Techniques	Mac OS, Windows 3.1, Win '95, Win '98					
103. CD-ROM/Multimedia Applications						
104. Electronic Research	Online, CD-ROM based, databases					
105. HTML/Web Page Development						
106. Troubleshooting						

AFFECTIVE EVALUATION

How do you feel about learning new technologies and programs. Please indicate to what extent you agree or disagree with each of the following statements.

1. Most of the new technologies which have become available to me have been easy to learn with relatively little outside support and I am eager to get my hands on more equipment so I can teach myself more.

strongly agree agree not sure disagree strongly disagree

2. Most of the technology that has been shown to me would do little to improve my ability to teach or my students' ability to learn and think.

strongly agree agree not sure disagree strongly disagree

3. I have made enormous progress during the past year or so in learning new technologies to introduce them to my classroom.

strongly agree agree not sure disagree strongly disagree

4. People make far too big a deal over the management issues arising out of new technologies (scheduling, break-downs, etc.)

strongly agree agree not sure disagree strongly disagree

5. I have been able to integrate the use of new technologies so fully into my classroom that I am not sure what I would do if they took them away from or cut off the electrical power.

strongly agree agree not sure disagree strongly disagree

6. These new technologies have forced me to turn the classroom upside down and substantially change the way I teach or relate to the students.

strongly agree agree not sure disagree strongly disagree

7. My biggest fear of these new technologies is embarrassment in front of my students or my colleagues.

strongly agree agree not sure disagree strongly disagree

8. I prefer to learn new things as an individual.

strongly agree agree not sure disagree strongly disagree

9. The best way to learn new technologies is to participate in formal training classes which show us just how to use the machines and how to use them in our classes.

strongly agree agree not sure disagree strongly disagree

10. Sometimes I feel that there is just too much change coming too fast without enough planning or support for teachers. I wish they would just slow down.

strongly agree agree not sure disagree strongly disagree

11. I have begun to enjoy teaching more than ever before because of the new power these technologies have put in the hands of my students and myself.

strongly agree agree not sure disagree strongly disagree

12. I do best with new programs and approaches when I can learn them with a partner.

strongly agree agree not sure disagree strongly disagree

13. All this new equipment and technology is basically one more bandwagon in a long chain of innovations which have made little impact on my classroom or my students.

strongly agree agree not sure disagree strongly disagree

14. Even though I have more to learn, I am really proud of what I have accomplished with new technologies and I am ready to share my inventions with colleagues both here in the district and at professional meetings or conventions.

strongly agree agree not sure disagree strongly disagree

15. I sometimes feel that I have been left behind when it comes to technology. I don't feel comfortable with it and I don't see what good it will do.

strongly agree agree not sure disagree strongly disagree

Teacher leadership is critical for teachers training teachers. Below are self evaluation rubrics to be used as discussion starters in focus group and personal evaluations to facilitate school reform.

Self Evaluation Professional Responsibilities CONTRIBUTING TO THE SCHOOL AND DISTRICT Relationships with colleagues Service to the school - Participation in school and district projects				
LEVEL OF PERFORMANCE				
ELEMENT	UNSATISFACTORY	BASIC	PROFICIENT	DISTINGUISHED
Relationship with Colleagues	Teacher's relationships with colleagues are negative or self-serving	Teacher maintains cordial relationships with colleagues to fulfill the duties that the school or district requires	Support and cooperation characterize relationships with colleagues.	Support and cooperation characterize relationships with colleagues. Teacher takes initiative in assuming leadership among the faculty.
Service to the School	Teacher avoids becoming involved in school reform.	Teacher participates in school reform when specifically asked.	Teacher volunteers to participate in school reform, making a substantial contribution.	Teacher volunteers to participate in school reform, making a substantial contribution, and assumes a leadership role in at least some aspect of school life.

Professional Development Time Line

Professional Development Assessment and Evaluation

Lame Deer School will use assessment and evaluation regularly throughout the school year to assess the **cognitive** and **affective** growth of their teachers. As training is provided and the staff moves through the process of integrating technology into the curriculum, and as the staff becomes active participants in school reform, we will document the changes in the active learning of the staff in ways that are meaningful, natural and powerful.

Lame Deer School District Professional Development Assessment Time Line			
Type	Procedure	To	Time Line
	The Technology Committee will provide and analyze the following assessments and evaluations:		
Diagnostic	Provide a Self Evaluation to determine at what stage staff are in learning and applying new technologies.	100% - Staff	August PIR
Diagnostic	A survey to determine what kinds of staff development experiences staff will need to help them feel comfortable and proficient in technological literacy.	100% of Staff	Spring
Diagnostic	A survey to determine what specific staff development and at what level teachers would like to receive training	100% of Staff	Fall
Diagnostic	A survey to determine the affective results of the installation of the equipment.	100% of Staff	As needed
Formative	Small focus groups (5-7 staff members) will evaluate their affective responses to school reform and integration of technology.	100% of Staff	As needed

Formative	Staff members, community members and parents will complete a subjective evaluation at the completion of all training, classes and workshops.	100% of participants	As classes are provided
Summative	Staff members will complete a reflective evaluation of all staff developments. (Journal writing, essay, notes, lists etc. to reflect on the use and adaptation of training.	100% of staff	One month following all training
Summative	Teachers will present at a school technology fair, a project they have developed for their classrooms, which integrates technology into standards based education.	Participatory Staff	End of Year
Formative	As technology develops, recommended changes will be made to the types of technologies that will be purchased and the training that is provided	Technology Coordinator and Technology Committee	Yearly
Summative	All attendance, content and application of staff development, community workshops and parent participation will be collected in and available for assessment by OPI	100% of all workshops	End of Project Year
Formative	Rubrics on best practices will be used to promote discussions and as self assessments	Small groups, rotating basis	Yearly
Diagnostic	Equity record of use	Students 4-12 Teachers K-3	Daily

ASSESSMENT AND EVALUATION

Assessment involves collecting information about the progress of learners towards the learning goals set out in the teaching program.

Evaluation is the analysis of this information to see whether adaptation of teaching programs is necessary.

PRINCIPLES OF ASSESSMENT

Certain basic principles underlie assessment.

The Learner

- ' The learner should be at the heart of all educational assessment.
- ' Assessment is only useful if it promotes the progress of the learner.
- ' Assessment information should be shared with the learner.

Forms and Styles

- Assessment should be on-going, accurate, and objective.
- Assessment should take many forms, gathering information from several settings, and using a variety of methods best suited to the needs of the learner.
- The forms of assessment should be appropriate to the agreed objectives or skills to be assessed.
- Effective assessment takes into account varied learning styles and cultural expectations, especially for those learners whose mother tongue is not English.

Relation to Evaluation

- Assessment and evaluation are interrelated; the quality of each affects the other.

Lame Deer School teachers will bear in mind the effect on the learner being observed, and consider how differently the learner might behave, or how much better they may succeed in a setting outside the school.

PURPOSES OF ASSESSMENT

Collecting information may serve many purposes.

The learner's achievements, needs, and progress

- ! Information can help to build up a picture of what a learner can do and what needs she or he might have.
- ! It can be used to monitor a learner's development and to establish the point they have reached in a particular learning process.
- ! It can provide a stepping-off point in developing student-centered programs.

The student's interactions

- ! Information enables teachers to examine how students interact with each other.

PRINCIPLES OF EVALUATION

Sound evaluation, based on accurate, objective assessment, means making judgements on the following things.

Varied forms and methods

- Are these on-going?
- Do they build on information gathered in a variety of appropriate ways?

Individuals and their culture

- Is there a focus on the achievement of individuals or of groups, rather than on comparisons between people?
- Are the learner, parents, and others involved and allowed to play an active role in each stage of the process?
- Have attitudes and values as well as skills and knowledge been considered?
- Have cultural and gender differences been taken into account?

Relation to teaching and teachers

- Does the evaluation influence learning objectives, teaching methods, and the use and selection of resources?
- Is it relevant to the teacher?
- Does it stem from carefully formulated school policy.

PURPOSES OF EVALUATION

Evaluation is an essential link between learning and planning for further teaching. It is part of the cycle in which those who have set the aims and objectives for the program work together to determine the following things.

Stage of learning and future plans

- What has been learned?
- How well does this achieve aims and objectives?

○What still needs to be learned, and what new aims and objectives need to be set for the next steps in learning?

Resources, strategies, activities, and programs

○What resources or teaching strategies should be selected?

○How can teachers be helped to organize and check effective activities or programs?

Improving teaching

○What are the ways of helping teachers to identify their own strengths and recognize any skills they might need to develop?

Involvement of the community as a whole

○How can teachers, teachers and parents, or teachers and students be allowed to share in a task which aims to improve learning?

○How can a profile of the community's expectations of a school be built up?

Any improvement in learning and teaching will depend on effective evaluation.

We understand that the evaluation process is twofold for the teacher and for the student. The teacher must first understand how to use the technology such as productivity tools and the school operations software to a high level of success. Once the understanding of how and why a technology tool can be used and mastered, the teacher will then utilize the technological tool to improve the instruction of a lesson. The following example indicates how this process works in the real classroom setting:

The teacher will effectively use word processing skills to develop a handout for a Government lesson that will be presented as a Power Point demonstration involving web sites and information from the United Nations and other international resources - traditional and non-traditional. The students will be asked to complete the worksheet using all resources available and then to create their own Power Point presentation on a specific country of choice.

The student must receive this lesson through traditional and non-traditional channels. The teacher will utilize lecture and traditional classroom presentation style to introduce the lesson. The student will then be asked to review the Power Point demonstration. Now the student must take the information presented and using technological tools, must develop a similar presentation on a specific country.

The teacher will be able to evaluate their ability to use the basic tools of technology and also enhance their educational lesson with these tools and their expanded abilities. The student will also need to evaluate their success at completing the assignment from the aspect of the teacher's successful presentation and the students' created work.

The following rubric will be used to determine the students' mastery of the tools of technology.

Level 2	Level 3	Level 4	1	2	3	4
I select, open, use and close a program on my own	I can open and use more than one program at the same time.	I can learn new programs on my own.				
I save documents to different drives.	I create my own directories to keep files organized.	I move files between directories and drives.				
I use a word processor for basic writing tasks.	I use the tools of the word processor to edit my work.	I use the word processor to revise and publish my writing.				
I enter data in a spreadsheet and create charts.	I use labels and choose a chart which best reflects my data.	I use formulas to help analyze data in a spreadsheet.				
I can locate information from a pre-made database and add or delete information.	I can make my own database from scratch.	I can generate reports from a database in order to answer questions.				
I open and create simple pictures with painting and drawing programs.	I can edit clip art, import graphics, and use clipboard to take objects from one place to another.	I can invent, select and use graphics in order to make a point or illustrate what I have learned.				
I print files using the printer icon.	I can choose the printer that I want to have print in other locations from the print menu.	I am able to identify printer problems and notify the teacher.				
I compose and send e-mail messages within the school district	I compose and send e-mail messages within the school district	I use e-mail to request and send information globally concerning research I'm doing.				
I find information from electronic sources.	I select, gather, save information from multiple electronic sources to answer a thinking question.	I analyze and evaluate the information I've gathered.				

I can use other people's multimedia products.	I can create multimedia presentations combining text with graphics, etc.	I can design an effective multimedia presentation using motion, sound and still graphics to share ideas.				
I use a variety of sources (Paintbrush, InfoFinder, CDs) to import pictures into a publishing program for a presentation.	I combine two or more technologies (for example, QuickTake, scanner, laser disk) in a presentation.	I can design an effective multimedia presentation employing motion, sound and still graphics to share ideas.				
I occasionally use a video camera for home or school projects.	I have created an original video tape using editing equipment.	I use computer programs to edit video tape presentations.				
I visit Internet sites selected by my teacher and successfully use Back and Home buttons.	I use search tools to locate information in a timely manner.	I help create pages for classroom projects or virtual museums.				
I take care of the equipment and leave it ready for the next user.	I understand and follow District rules concerning harassment, language, passwords, copyright, privacy, appropriate use of resources, etc.	I model responsible use and teach others				

Technical Assistance

A part-time technician would be appropriate to assist with general troubleshooting allowing more time for the technology coordinator to work with the following:

- establishing, maintaining, and upgrading an instructional/media technology center
- work collaboratively with teachers to integrate technology into the district curriculum
- serve as a technology resource person for students, staff, and the community
- maintain an up-to-date software and hardware inventory
- manage and maintain district local area network (LAN) to ensure efficient and effective operations
- develop and implement procedures for scheduled backup and archiving, disaster recovery and security
- provide leadership in using networked resources (i.e. Internet, MetNet, etc.) to support student and staff information needs.

The development of a Technology Training Center with a Professional Materials Collection will compliment the ongoing training needs of staff members. At present, the purchase of professional training materials is directed thru standard collection development procedures. In some cases, instructors have purchased personal copies to augment their studies alone. Now these resources should be purchased to support the software and hardware standards of the district. With a central location, the materials will be utilized appropriately.

The district is presently wired for Internet access to all classrooms and libraries. Replacement of the coaxial with fiber optics has allowed for an increase in Internet speed. However, in the future, 1000 megabit network cards will be pursued to increase the access speed to the Internet. The network will provide access to the following information resources;

Internet:

Preparation and installation of equipment:

- Pull any additional wire needed
- Install Network equipment
- Upgrade wiring
- Upgrade network cards
- Upgrade computers
- Install software and IP configuration

Internet training will be in the following areas:

- District AUP policy

- E-mail, Browser, and other software packages
- Safeguarding children on the Internet
- School district uses of network resources

CURRICULUM PLANNING, INSTRUCTION & EVALUATION

The Lame Deer School District has adopted its Five Year Comprehensive Education Plan with a continuous curriculum revision cycle with each academic area, vocational area and support staff teaming together to produce a standards based curriculum. Reading and Math will be a focus for the next two years. The staff has been supported by administration, community members and by a mill levy for technology and curriculum development. Inclusion of technology has been a primary concern and is currently being addressed in all academic areas. On pages 49-55 of the plan you will find a grade specific sample of our Technology Skills Curriculum Enhancement, which demonstrates technology integration and will be infused into the K-12 curriculum.

PLANNING FOCUS

A primary focus of the district is school improvement based on engaged learning and integration of technology across the curriculum and performance based assessment. Each year the staff develops cognitive, affective and parental involvement goals based on the self assessment rubrics contained in this plan. By defining individual goals, the staff will begin the academic year with a focus and purpose for engaged learning.

The role of technology in enhancing the curriculum and instruction of Lame Deer Public Schools is the core of this plan. Computer literacy, technology literacy, keyboarding, and communication skills are areas in which students need to receive training so that they may integrate technology in their chosen walk of life. In addition, students need to be exposed to technology as it is used as an aide for instruction. The days of the student receiving technology education as an optional bonus are over. To ignore the importance of technology within the educational world is to say that the printing press did nothing for reading. However, technology tools should enhance and enlarge the educational experience, not drive the outcome.

Several problems arise in this area which include the following: technology is not consistently integrated with district curriculum, instruction, and staff support; many teachers lack the background and opportunity to integrate technology into their existing curriculum; teachers do not have the necessary training and resources to integrate technology into their curriculum.

The following four areas need to be addressed in Lame Deer Schools to ensure that technology purchases are supporting curriculum and student learning:

- A. Identify technology skills that all students should master, and suggest ways to integrate these skills in the content areas.

Lame Deer Schools has adopted a set of skills which each student should possess when they leave the district (see Graduation Expectations, page 6). When designing curriculum, integrating these skills into the new curricula should be ensured in order for our students to complete these skills. The skills will be learned through regular classroom instruction and not be part of a separate technology curriculum and/or a course. The Lame Deer School District has adopted and implemented the Montana Content and Performance Standards for all content areas with a focus on the technology standards.

- B. Ensure that curriculum drives technology decisions (purchases are consistent with long-range goals and curriculum).

Curriculum objectives or administrative functions need to be identified when purchasing new technology. All purchases need to align with this technology plan to help achieve the district long term goals.

- C. Technology integration training should be ongoing and integral to all areas.

As curriculum reforms are taking place, staff training needs will be identified and structures put in place to deliver the needed staff development. Each year the curriculum will focus on curriculum/technology integration areas at the K-6, junior high, and high school level.

- D. Ensure equitable access to the tools of technology.**

LAN/WAN

Ethernet based local and wide area data network linking rooms for instructional and administrative services at our schools provides:

- World wide information available through the Internet
- Efficiency in management data transfer (services)
- Direct connection to Internet for each building
- Data transfer related to district management functions
- Data transfer for classroom collaboration between buildings
- Access to e-mail accounts for district employees
- Mentoring opportunities for students from outside experts
- Access to research for students and instruction

Voice System

Telephone services to every classroom with voice mail provides:

- Parent/teacher communication
- Teacher/teacher communication
- Emergency/safety issues

Computer Access

Computers with CD ROM, sound and full motion capability connected to the network, equipped with an Office Suite provides:

- Improved learning in the content area
- A diverse learning environment
- A vehicle for staff development
- Access to the Internet

Computer labs provide:

- Greater student access to computers
- The ability to have each student on a computer

Peripheral Needs

Access to digital cameras, scanners, printer, laserdisc players and projection systems provide:

- Enhanced instructional use of the computer technology in the district
- For student developed multi media research projects

Curriculum Instruction will emphasize the following:

- < Students using computers ethically.
- < Students behaving responsibly around technological equipment.
- < Students who are comfortable in the use of technology and multi-media hardware and software.
- < Providing access to technology for all students and community members.
- < Constructing a recommended and available software list for teachers with notations to curricular integration.
- < Developing a technology resource center with emphasis on professional development materials.

Technology Skills Enhancement

Kindergarten

Applied Skills	<p>The student will:</p> <ul style="list-style-type: none"> C identify technologies that help people work, play, learn and communicate C understand classroom rules for computer use and care appropriate to age/grade level C identify physical components of a computer system (e.g., monitor, keyboard, disk drive, printer) C demonstrate correct startup/shutdown procedures under supervision C demonstrate purposeful and appropriate movement of the mouse C utilize the different functions of the mouse (e.g., single/double click, click & drag)
Integration Ideas	<p>The student will:</p> <ul style="list-style-type: none"> C use software applications that support K concepts C use technology to enhance fine motor development

1st Grade

Applied Skills	<p>The student will:</p> <ul style="list-style-type: none"> C identify uses of technology at home and at school C identify activities that can be done with a computer C follow classroom rules for computer use and care appropriate to age/grade level C insert and eject disk correctly C identify fundamental computer terms (e.g., disk, software, hardware, booting/starting, cursor, icon) C demonstrate the use of letter and number keys C demonstrate correct computer startup/shutdown procedures independently C use all mouse functions correctly; that is, click and drag, double click, etc. C open an application, input information, print, and close the application under supervision C type appropriate sight words on the computer screen (e.g., cat, dog, etc.) C learn and use the language of computers and technology C identify and locate directional keys on the keyboard
Integration	<p>The student will:</p> <ul style="list-style-type: none"> C use software applications that support 1st grade concepts C use technology to accomplish a task (e.g., draw a picture, print words)

2nd Grade

Applied Skills	<p>The student will:</p> <ul style="list-style-type: none"> C identify uses of technology in the community C identify how community workers can use computers to help them do their jobs (e.g., policeman, grocer, school principal) C follow classroom rules for computer use and care appropriate to age/grade level C locate and use symbol keys and special keys (e.g., period, question mark, caps lock, arrow keys, shift, delete, space bar, arrow, command, option and esc C demonstrate correct keyboarding posture C use computer terms (e.g., cursor, select, highlight, open, save, print) C use pull down menu C demonstrate the use of the close box, zoom box, size box, moving bars, and scroll arrows C use the computer to access information (e.g., Encarta Encyclopedia, National Geographic) C learn proper care of disks and equipment
Integration Ideas	<p>The student will:</p> <ul style="list-style-type: none"> C use computer applications to perform selected class assignments C utilize software applications that support grade 2 curriculum C utilize technology to accomplish a task (e.g., illustrate a story)

3rd Grade

Applied Skills	<p>The students will:</p> <ul style="list-style-type: none"> C identify and demonstrate ways technology has changed the lives of the people in the local community C demonstrate understanding of the copyright laws that protect what a person or a company has created C understand that it is against the law to make a copy of a copyrighted software program C follow classroom rules for computer use and care appropriate to age/grade level C open a previously saved document, use editing commands and saves to a specified location C insert graphics* C use thumb to press space bar and little finger for shift and return C use computer terms (e.g., I-beam, cross hair) C save a document C cut and paste an image or graphic into a document* C use the computer to access information C start and restart computer using appropriate commands C access windows search menu
Integration Ideas	<p>The student will:</p> <ul style="list-style-type: none"> C use computer applications to perform selected class assignments C utilize software applications that support grade 3 curriculum C utilize technology to accomplish a task (e.g., research famous Americans)

4th Grade

Applied Skills	<p>The student will:</p> <ul style="list-style-type: none"> C identify the importance of technology in daily life and describe examples of people using technology to access information (e.g., bank machines, grocery scanners, automated climate control, students accessing on-line information, travel agents reserving airline tickets) C recognize that violation of the copyright law is a crime C comply with Acceptable Use Policy C exhibit responsible use of hardware and software C demonstrate proper keyboarding techniques for keying all letters C use a word processing program to enter a paragraph into the computer and print it C use bolding, underlining, cut, copy, paste, justification functions and use shortcuts C save and copy files on a disk C recognize use of telecommunications for information access and communication C clean computer, screen, keyboard and mouse C recognize models and types of computers (e.g., Mac and PC) C import and edit an image or graphic (e.g., Paintbrush, Paint) C log onto the Internet with teacher supervision
Integration Ideas	<p>The student will:</p> <ul style="list-style-type: none"> C use proper mechanics and format for a presentation C use computer applications to perform selected class assignments C utilize software applications that support grade 4 curriculum C utilize technology to accomplish a task (e.g., gather and compile weather data)

5th Grade

Applied Skill	<p>The student will:</p> <ul style="list-style-type: none"> C describe the influence of technology in the United States C identify information technology as a tool for accessing current information and describes advantages/disadvantages C recognize that violation of the copyright law is a crime C comply with Acceptable Use Policy C exhibit responsible use of hardware and software C recognize when a particular technology is the most efficient resource C understand viruses and strategies for avoiding them C create a word processing document, correct typing/spelling errors, save and print C use a thesaurus within an application C demonstrate desktop navigation on the computer (e.g., folders, files, applications) C use a word processing program to publish a report of more than one paragraph using a given format C change fonts, size, and style of text C use search to locate files C demonstrate how and when to clean hardware
Integration Ideas	<p>The student will:</p> <ul style="list-style-type: none"> C use computer applications to perform selected class assignments C utilize software applications that support grade 5 curriculum

	C utilize technology to accomplish a task (e.g., word process a report with a title page and cover)
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6th Grade

Applied Skill	<p>The student will:</p> <ul style="list-style-type: none"> C identify ways that technology promotes a global community C identify examples of copyright law violations and possible penalties C understand the public nature of networked electronic communication and information resources C understand the District Acceptable Use Procedures as they relate to network access of information and communication resources C understand responsible behavior in an electronic environment C understand proofreading and editing of documents C understand basic computer terminology (i.e., RAM, hard drive, etc.) C understand word processing and the basic functions associated with word processing C utilize a variety of software to enhance academics C utilize the Internet for research and project development C develop an understanding of the local network C develop the understanding and usage of resource sharing
Integration Ideas	<p>The student will:</p> <ul style="list-style-type: none"> C use commercial software to organize and visually display data to draw conclusions C use telecommunications to communicate with a distant computer or an on-line conclusions C utilize technology to accomplish a task or complete a class assignment (e.g., word process a term paper, prepare a letter)

7th Grade

Applied Skills	<p>The student will:</p> <ul style="list-style-type: none"> C identify, as intellectual property, work created by using a particular technology C understand the public nature of networked electronic communications and information resources C understand the District Acceptable Use Procedures as they relate to network access of information and communication resources C understand responsible behavior in an electronic environment C be introduced to the functions of multimedia and presentation applications <ul style="list-style-type: none"> < identify terms related to computer-generated productions (e.g., clipart, hypertext, CD-ROM, VO) C understand and be able to use function keys C understand the functions of an operating system C be introduced to the functions of the Internet and E-mail C continue development of multi-media projects incorporating topical research using the Internet and other information sources C be able to use search engines
Integration Ideas	<p>The student will:</p> <ul style="list-style-type: none"> C utilize technology to accomplish a task or class assignment (e.g., create a multimedia presentation, research a topic using a CD-ROM encyclopedia, create a graph to illustrate math data) C use software applications that support grade 7 curriculum C use the language and protocol of Internet

8th Grade

Applied Skills	<p>The student will:</p> <ul style="list-style-type: none"> C recognize the need for protection of software and hardware from computer viruses, hacking and theft C understand privacy and safety issues C understand the public nature of networked electronic communication and information resources C understand the District Acceptable Use Procedures as they relate to network access to information and communication resources C understand responsible behavior in an electronic environment C be introduced to the functions of spreadsheets <ul style="list-style-type: none"> < merge information from a spreadsheet into a word processing document < create graphs using spreadsheet data and import into a word processing document C understand the functions of basic commands associated with word processing and spreadsheets C utilize the functions of a data base application <ul style="list-style-type: none"> < understand how to merge database information, create labels and address envelopes C use function keys C be introduced to the basic functions of desktop publishing <ul style="list-style-type: none"> < understand the concepts of digital imaging, importing graphics, design, etc. C utilize the functions of Internet and E-mail
Integration	<p>The student will:</p> <ul style="list-style-type: none"> C utilize technology to accomplish a task or class assignment (e.g., use a database to record scientific data, create a Civil War newsletter) C use software applications that support grade 8 curriculum

9th Grade - 12th Grade

Applied Skills	<p>The student will:</p> <ul style="list-style-type: none"> C understand the District Acceptable Use procedures as they relate to networked access to information and communication resources C act responsibly in an electronic environment C understand the public nature of networked resources C identify examples and understand the social impact of advanced and emerging technologies C understand issues and legal ramifications associated with copyright, vandalism, netiquette, and types of software (e.g., licensed, shareware, public domain) C keyboard at a rate appropriate to the task C understand and be able to apply the fundamentals of word processing which may include: <ul style="list-style-type: none"> < correct use of symbols < locate and describe special function keys (control, option, F keys) < use edit features (i.e., cut/paste, copy, Move, spell check, grammar check, and thesaurus) < activate foreign language characters < identify data to be included in a report and generate a report using the data base < enter headers and footers, import graphics C understand and be able to apply the fundamentals of a database which may include; <ul style="list-style-type: none"> < changing fonts, size, and style of text < locating specific information in a data base < entering and modifying data in data base C understand and be able to apply the fundamentals of a graphics program (e.g., use draw mode/tool, imports, and manipulation) C create a written report
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	<ul style="list-style-type: none"> C understand and be able to apply the fundamentals of spreadsheets which may include; <ul style="list-style-type: none"> < entering data into a spreadsheet < recognizing the difference between text data and numerical data < formatting numbers < changing the way numbers appear for \$, %, and decimal place values < formatting labels to right, left, center < using functions (i.e., @if, @pmt, @max, @min, @sum, @avg, etc.) < creating charts and graphs C understand and be able to apply the fundamentals of telecommunications which may include; <ul style="list-style-type: none"> < Internet < E-mail < Search Engine C access databases for business and mathematical applications C utilize <ul style="list-style-type: none"> < file navigation and management < hierarchy of a file management system (e.g., saving, naming, renaming, moving) C develop word processing skills for application in personal, school, or community projects C create effective desktop publishing documents C create presentations using a variety of multi-media sources to communicate new ideas and/or learned information (i.e., PowerPoint) C utilize the Internet effectively for research C incorporate spreadsheets in mathematical computation, business application, and financial statements C prepare paperwork necessary for employment search
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Scope and Sequence of Technology Skills

SKILL	Grade Level												
	K	1	2	3	4	5	6	7	8	9	10	11	12
Sharing/Collaboration	I	D	A	R	R	R	R	R	R	R	R	R	R
Etiquette	I	D	D	D	D	A	A	A	R	R	R	R	R
Keyboard Knowledge	I	D	D	D	D	D	D	D	D	A	R	R	R
Computer Components Identification	I	I	D	D	D	D	D	A	A	R	R	R	R
Use & Care of Equipment	I	I	D	D	D	A	A	A	R	R	R	R	R
CD	I	I	D	D	A	A	A	R	R	R	R	R	R
Graphics	I	I	D	D	D	D	D	D	A	A	A	A	A
Distance Learning	I	I	D	D	D	D	D	D	A	A	A	A	A
Peripherals		I	D	D	D	D	D	D	D	D	D	D	D
Word Processing		I	D	D	D	D	D	A	A	R	R	R	R
Information Access		I	D	D	D	D	D	A	A	A	A	A	A
Calculators		I	D	D	D	D	D	D	D	D	D	D	D
Desktop Management			I	D	D	D	D	D	D	D	D	D	D
Trouble Shooting			I	D	D	D	D	D	D	D	D	D	D
Desktop Publishing				I	D	D	D	A	A	A	A	A	A
Computer Ethics					I	D	D	D	A	R	R	R	R
Presentation					I	D	D	D	A	A	A	A	A
Telecommunications					I	D	D	D	D	A	A	A	A
Digital Photography					I	D	D	D	D	A	A	A	A
Database						I	D	D	D	A	A	A	A
Spreadsheet							I	I	D	D	A	A	A
Video Production								I	D	D	A	A	A
Emerging Technologies									I	D	D	D	D

GOAL: *Provide programs developed collaboratively with community technology education, adult literacy, and technology education for the disadvantaged.*

Performance Standard: 80% of participants shall rate their involvement or participation as a positive “*Learning for Life*” experience as measured by the program evaluation form.

Community Awareness/Education

We recognize that it is important for the community to be involved in student learning. Research has demonstrated that student learning is increased when parents and families are involved in the educational process. As parents become better acquainted with teachers, they become more supportive. Lame Deer School District has formed a long-standing partnership with local area businesses and community members. Community members, teachers, staff, and local businesses embraced NetDay when it was proposed. As a result of partnerships formed between the school, the PTSA, area businesses and community members, the district received over \$7,500 worth of cable and other items to enable the district to wire the buildings. School administrators, business members, local citizens, school board, and staff members have worked hard to develop a clear vision of technology and its place in the Lame Deer School District. Broad-based support and involvement lead to Lame Deer having the largest Net Day in Montana on October 26, 1996. In the fall of 2000, the community overwhelmingly supported the QZAB program for school renovation, improvement and the acquisition of technology with the passage of the bond election.

The school is the educational/technological hub of the community. Community members continue to have the opportunity to use the school to access the new technologies and receive training in Internet and application software. Adult education classes will be encouraged and taught and they will be updated to include and reflect current changes and advances in technology that the school purchases.

A technology survey and forum have been conducted and will be on-going to assist in this technology plan. On-going community involvement will be ensured by the inclusion of community representatives on the technology committee. The following are strategies we plan to use that will assist in gaining community involvement:

- Make teachers and administrators more accessible to parents through the use of voice mail and email.
- Use of the district web site that will include helpful links for parents and the community.
www.lamedeer.k12.mt.us
- Create an electronic field trip that anyone with Internet access can participate in.
- Conduct a Technology Fair that will showcase each school's technology projects.

District schools can assist parents and families by forming collaborations with the community at large to address the needs of the school families. For example,

- After school computer use can be available for community participation.
- School libraries can be accessed from students' homes for research assignments.

Funding

“To ensure that the natural power improvement/cost reduction cycle brings new technology within reach, schools need to view upgrading technology as a continuous process, budgeting a set amount for purchasing a certain number of new computers each year.” Odvar Dyrli and Daniel E. Kinnaman, “Technology in Education, Getting the Upper Hand,” *Technology and Learning*, January 1995, p. 39.

Performance Standard: 100% of the technology budget will be spent according to guidelines as established in the Technology Plan.

Funding continues to be the major problem of technology. The problem is exacerbated by the fact that technology, in today’s world, seems to be outdated the minute it is purchased. Providing the necessary funding to purchase technology will require innovation on the part of the technology committee and community. The committee will investigate grant writing and business partnerships to supplement the lack of money. Corporate business partnerships, community participation, governmental support and foundation grants have been aggressively pursued and need to continue. Guidelines for donations are being developed to streamline this process.

Program	Coordination
Title I	<ol style="list-style-type: none"> 1. A goal of both Title I and Title VII School Wide Programs is the creation of a “School Without Labels”; providing a seamless web of services to all students without the stigma of pulling students out of their mainstream classes and away from their peer group. Services, training, technology, materials and support will be utilized within the classroom. 2. The technology plan supports the program goals of high achievement for all students by applying technology to the challenge of improving student performance. 3. Emphasis will be given to math and reading.
Title II-Part A Title II- Part D	<ol style="list-style-type: none"> 1. Classroom reduction, used to hire more teachers and aides. 1. Used to pay Technology Director’s salary 2. Math and Science teacher staff development programs will include full integration of technology into sound instructional practice. 3. Technology will be applied to learning in the content areas of math and science at all grade levels including carefully selected software applications to extend and enhance the local standards and lead to the achievement of math and science learning benchmarks.
Title III	<ol style="list-style-type: none"> 1. Limited English Proficiency 2. Monies used to purchase reading programs such as SRI Read 180

Title IV	<ol style="list-style-type: none"> 1. There is a strong relationship between resiliency in students and their academic success. The goal of the drug free school program is to promote resiliency and to provide students and teachers with access to current information regarding substance abuse and abuse prevention. The Internet is a key contributor to this information base and a strong motivator for student learning. 2. Lame Deer will continue to pursue this federal program and use it to the fullest extent possible to help with integrating technology into the curriculum..
Title IX	<ol style="list-style-type: none"> 3. Support equal access by gender.
Carl Perkins	<ol style="list-style-type: none"> 1. Technology is already a center piece of all Perkins funded programs and will continue to be. 2. Integration of technology into the world of work will be a focus. 3. Use of technology for on-going program enhancement has been a strong suit of our Carl Perkins programs. 4. Students graduation from these programs have skills that could be drawn upon for some of the training required in the plan.
E-Rate	<ol style="list-style-type: none"> 1. These funds have and will be used to implement phases of our technology plan that are not within the general fund or technology budget but do fall within the guidelines of the technology plan.

Funding Considerations:

- < Expand the technology budget within the annual Lame Deer School district budget.

- < Adequately allocate funding to fully implement the need of the school district. Dedicating financial resources will provide comprehensive and applicable technologies for all staff and students.

Maintenance, Network, Security

Because of the large amount of time and money involved in obtaining a quality technology base, and the training to use it, it is vital to provide periodic and per incident maintenance. This will include periodic cleaning of physical devices as well as virtual devices. Cleaning involves dusting, cleaning, checking connections, and general evaluation on a quarterly basis. Realizing that this is unrealistic in a school environment, this plan will call for an annual cleaning for most computers and related devices, and a semi-annual cleaning for high dust areas. Also, the laptop computers may need cleaning more often. Other equipment, Televisions, VCR's, etc., may only require cleaning every other year depending on use. A schedule of cleaning will be kept for each piece of equipment and will be reviewed at the end of each school year. The cleaning of virtual devices, for example hard drives, will take place annually.

Maintenance that is required when a piece of equipment fails, or a software package is not functioning properly will be performed by the Technology Director, advanced students (SWAT Team - Students Willing to Assist with Technology), staff members, and as necessary an outside specialist. This funding will become part of the yearly budget. This model of maintaining the new technologies will be reviewed yearly to see if it is meeting the needs of the staff and students, and will be revised as necessary. Maintenance will also include the security of the devices and the computer network. The Technology Coordinator will be responsible for adding additional resources to the Network, including new users and deleting outdated users. Efforts will be made in the form of accepted use policies and device sign in sheets to reduce or eliminate purposeful tampering and vandalism. Maintenance will also include the security of the devices and the computer network.

The district has installed a Sonic Wall Device for web filtering to meet the requirements of E-rate. Symantec Corporate Edition of anti-virus has been installed on all computers within the district. An acceptable Use Policy has been adopted for students as well as staff members.

This area will be under continual review and revised as needed.

Legal Aspects

Legal issues in technology continue to be an issue with the increased usage at Lane Deer School District and the ever-changing environment of technology. A significant responsibility of the technology committee and the technology coordinator is to be ever mindful of these changing issues. The technology committee is committed to the following areas:

- T All staff will understand the copyright laws of technology material. This will be included in a staff in-service. The copyright laws direct responsible use of all of technological tools, not just the computer. The website <http://fromnowon.org/jun96/legal.html> may help with this issue.
- T Currently the Lane Deer School District is exceeding the minimum specifications according to state requirements. We understand the importance of this to maintain state accreditation.
- T We have implemented an Acceptable Use Policy (AUP) in the district as shown below. We have created one for grades 2-6 and one for grades 7-12. These documents will be updated as the technology needs change. We have included the policy that all users must also comply with the AUP of our Internet and E-mail provider.

Internet Service Provider

The Lane Deer District has established a contract with Range Telephone Cooperative an Internet service provider, which has allowed to have unlimited Internet access in the district.

The following forms are utilized to keep students and parents informed and responsible for actions using technology.

- ' Internet Acceptable Use Policy (Grades K-12)
- ' Acceptable Use of Electronic Networks (Staff Members and students)

Lane Deer Public Schools Acceptable Use Policy

Lane Deer Public Schools

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STUDENTS

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Student Internet & Electronic Devices Acceptable Use Policy

Computers and electronic devices are used to support learning and to enhance instruction LAN (Local Area Networks) and WAN (Wide Area Networks), allow people to interact with many computers and other electronic devices. The Internet or WAN, a networks of networks, allows people to interact with hundreds of thousands of

networks, computers and other electronic devices. All use of the Internet must be used in support of education, research and consistent with the purposes of Lame Deer School District. It is the general policy that all computers and other electronic devices, used through Lame Deer Public Schools LAN, are to be used in a responsible, efficient, ethical and legal manner. Failure to adhere to the policy and the guidelines for the use of the LAN and WAN, as described below, will result in the revocation of access privileges. (In some cases expulsion)

Items Not Allowed in Schools

Personal Laptops, Walkmans, MP3, iPods, cell phones, headphones (to include ear buds), electronic games, other music devices, are not allowed anywhere indoors during school hours (7:30am-6:30pm). Students are strongly advised to leave these items at home as school has proven to be an unsafe place for them.

Personal Laptop computers may not be connected to the Lame Deer School District's network, nor attempted to be connected. Students needing to use such equipment as part of a class or school assignment project should bring the equipment to the principal's office and leave it there until needed. Students who do not follow these guidelines will have their equipment confiscated and returned at a later time. Repeated violations will result in disciplinary action ranging up to and including suspension.

The school will NOT be liable/responsible for any lost or stolen items. This statement acts as the warning.

Unacceptable uses of Internet or Local Area Network include:

- Violating the conditions of Montana Education Code dealing with students' rights and privacy.
- Using profanity, obscenity, or other language that may be offensive to other users.
- Re-posting (forwarding) personal communication without the author's prior consent.
- Copying commercial software in violation of copyright laws.
- Using the network for financial gain, for commercial activity, or for any illegal activity.

Because access to the Internet provides connections to other computers and electronic systems located all over the world, users (and parents of users who are students) must understand that neither the Lame Deer School District nor District staff members control the content of the information available on these other systems. Some of the information available is controversial and sometimes may be offensive. The Lame Deer School District does not condone the use of such materials. A WAN filter, which adheres to CIPA standards, is in place, but does not guarantee to block access to all unacceptable materials.

Lame Deer acceptable use policy rules and regulations:

- The LAN and WAN accounts are free to users.
- It is a privilege to use these services.

A RESPONSIBLE user of the Lame Deer Network may keep an account as long as the user is a staff member or student in the Lame Deer School District.

A responsible user may:

- Use the network to research assigned classroom projects.
- Use the network for assignments which are located on either our local area network or an
- Internet based server.

A responsible user:

- May NOT use the network for an illegal purpose.
- May NOT use impolite, abusive, harassing, defamatory, or pornographic language or graphics.
- May NOT violate the rules of common sense or etiquette.
- May NOT access or change computer files that do not belong to the user.
- May NOT send or receive copyrighted material without permission.
- May NOT share his or her password with another student.
- May NOT access a Chat room.
- May NOT attempt to harm or destroy property or data or to infiltrate another computer system, including creating or uploading computer viruses.
- May NOT use network for Cyberbullying by sending hate mail, obscene remarks, discriminatory remarks, or other antisocial behavioral remarks.
- May NOT access Proxy Server sites.
- May NOT access the school network with a personal laptop, PDA, iPad or other personal electronic devices.

Policy History:

Adopted on: 03/09/04

Reviewed on:

Revised on: 11/09/2010

The district shall provide age-appropriate instruction to students regarding appropriate online behavior. Such instruction shall include, but not be limited to: positive interactions with others online, including on social networking sites and in chat rooms; proper online social etiquette; protection from online predators and personal safety; and how to recognize and respond to cyberbullying and other threats.

The system administrator and building principals shall monitor student Internet access.

Legal Reference: Children’s Internet Protection Act, P.L. 106-554
Broadband Data Services Improvement Act/Protecting Children in the 21st Century Act of 2008 (P.L. 110-385)
 20 U.S.C. § 6801, et seq. *Language instruction for limited English proficient and immigrant students*
 47 U.S.C. § 254(h) and (l) Universal service

INTERNET ACCESS CONDUCT AGREEMENT

Every student, regardless of age, must read and sign below:

By signing on to the Lame Deer Network you acknowledge that you:

Understand the rules and regulations of the Lame Deer Acceptable Use Policy.

Any user who does not comply with the Rules/Code of Ethics for Computer Users stands to lose computer privileges for two weeks (1st Offense) and the Remainder of the Year (2nd Offense). Offenses will be documented and filed with the Technology Coordinator by the supervising teacher. Repeated infractions will result in permanent termination of privileges. Discipline, including suspension or expulsion, also may be imposed on student users in accordance with Lame Deer School District policy. The Technology Committee reserves the right to impose greater penalties for severe 1st or 2nd offenses.

Lame Deer School District’s Technology Coordinator may access others’ files when necessary for the maintenance of the computing facilities. When performing maintenance, however, every effort will be made to insure the privacy of users’ files.

Lame Deer School District and its Technology Committee may modify its Acceptable Use Policy (AUP) and Rules/Code of Ethics for Computer Users as the need arises. Users will be notified of any changes.

This Acceptable Use Policy is approved by the Lame Deer School District Technology Committee and the Board of Trustees. The Lame Deer School District believes that technology is an integral part of today’s workforce and must serve as a fundamental element of the learning environment. This District is committed to promoting lifelong learning skills and developing productive members of society by using technology.

The Lame Deer School District and Technology Committee welcomes input from community members, parents and other staff members.

By signing this agreement, the student and parent/guardian have agreed to the above terms.

User’s Name (Print): _____ Date: _____

User’s Signature: _____

Status: Student ____ Staff ____ Patron ____ I am 18 or older ____ I am under 18 ____

If I am signing this policy when I am under 18, I understand that when I turn 18, this policy will continue to be in full force and effect and agree to abide by this policy.

Parent/Legal Guardian (Print): _____

Signature: _____

Home Phone: _____ Address: _____

Date: _____

Special Needs Learners

Keeping current on the legal issues of special education and their relationship to the use of technology is a concern of the technology committee and the technology coordinator. The technology committee understands the need for meeting the needs of all learners. Below are the considerations that will be made when considering curriculum revision, hardware acquisition, professional development and instruction.

Visual Impairments

- T Speech synthesizer's
- T Large monitors
- T Talking computers
- T Braille embossers and printers
- T Scanners and scan-reading software

Physical Impairments

- T Voice recognition systems
- T On-Screen keyboards
- T Enlarged or mini keyboards
- T Morse Code sip & puff switches

When purchasing computer hardware for schools, special consideration will be taken to meet the current and project instructional and administrative application needs of special needs learners. One system may address access issues for students with physical disabilities while another addresses the needs of students with low vision. The computer needs of students with disabilities are unique to each student and the need is for computer systems which provide options for several accommodations and adaptations.

The goal is to strive for universal access which refers to the design of products, such as computers, with an eye to provide the greatest accessibility with or without modification to the basic product. An example of universal computer access is a feature called StickyKeys which allows a typist to input information through the keyboard in a sequential rather than simultaneous fashion, allowing one-handed typists and others with physical disabilities to use standard keyboards. This accessibility feature is not always active but can be very easily activated by the students who need the feature.

Assess ability features may be built into computer systems or may be delivered by "add on" peripherals and or software. With both built-in or add-on features, it is critical to assure that the feature works with both the operating system and applications (instructional software programs) which will be used.

Built-in features offer a higher probability of being more robust, stable, cost effective and compatible with operating systems and applications (instructional software programs) than add-on features. However, not all access features are available as built-in features and obtaining an add-on may be necessary. Add-on access features may not be an option in a network system with "dumb" terminals since the end units do not have their own processing capability needed to support the add-on feature.

Equal Access

The Lane Deer School District has assessed our practices to determine whether students are receiving equitable access to equipment and instruction. The following forms allow us to collect quantifiable data on computer laboratory usage and technology course enrollments. The strategy lists are not linked to a particular

problem, but provide **strategies for dealing with access, use, and curriculum inequities**. Each list is categorized further into areas of concern. The access section offers strategies that address funding inequities, between-school inequities, the limited economic means of some students and ways that school staff themselves can increase access.

Without consistent attention, equity is an illusive goal. The following tools assist the Lame Deer School District on focusing necessary and careful attention on whether all students benefit equally from district, school, and classroom use of technology.

Physical access to available educational technologies varies greatly across the Lame Deer School District. Funding differences is not between rich and poor, even though 80% of our students qualify for free and reduced lunches. There are no significant ethnic minority students in our district. Our inequities lie in the availability of equipment between the K-6, 7-8 and 9-12 school buildings. School-Wide Funds, ESEA Funds, QZAB, One-Time Only Funds, and Perkins Funds have helped equalize equipment across the district. The most critical access issue presently is not enough equipment, especially in the elementary. Our ratio of multi media/internet access is 200 computers per 750 students. The following check lists provide a quantitative evaluation of equity in Lame Deer School:

District Level

Always Usually Rarely Never

To what degree are you addressing these issues?

- | | | | | |
|-----|-----|-----|-----|--|
| ___ | ___ | ___ | ___ | 1. Do schools service mostly lower-income children have the same equipment and course offerings as schools serving mostly higher income children? |
| ___ | ___ | ___ | ___ | 2. Do schools serving mostly children of color have the same equipment as schools serving mostly white children? |
| ___ | ___ | ___ | ___ | 3. Do you work to overcome existing access inequalities between schools? |
| ___ | ___ | ___ | ___ | 4. Do you set minimum standards for technology in all district schools to ensure that all students have adequate access? |
| ___ | ___ | ___ | ___ | 5. Do you work with your local site councils on equity in educational technology so that they understand the ramifications of their decisions? |
| ___ | ___ | ___ | ___ | 6. Are schools with limited resources able to supplement existing courses or obtain full course offerings with distance learning technology? |
| ___ | ___ | ___ | ___ | 7. Do a proportionate number of experienced teachers teach in schools with predominantly students of color, resulting in equal access to high-quality instruction? |

School Level

Always Usually Rarely Never

To what degree are you addressing these issues?

- | | | | | |
|-----|-----|-----|-----|--|
| ___ | ___ | ___ | ___ | 1. Do all students and parents or guardians, especially those from special populations groups, receive a clear message from all levels - teachers, counselors, administrators - that technology literacy is valuable for all students? |
| ___ | ___ | ___ | ___ | 2. If you track students, do you provide students any the general and professional-technical tracks with the same access to educational technology as those in the academic track? |
| ___ | ___ | ___ | ___ | 3. Are computers housed in a variety of locations so that they are available to all students and for diverse uses? |
| ___ | ___ | ___ | ___ | 4. Are students without computers at home or who do not participate in private computer camps provided access to equipment and instruction to mitigate this disadvantage? |
| ___ | ___ | ___ | ___ | 5. If students without certified learning differences bring laptops to school, have you examined whether this creates any academic disadvantage for other students? |
| ___ | ___ | ___ | ___ | 6. Are students with disabilities provided with assistive devices so they are able to use available equipment? |
| ___ | ___ | ___ | ___ | 7. Do limited English speaking students have access to software programs and instruction in their first language or in an English as Second Language (ESL)environment? |
| ___ | ___ | ___ | ___ | 8. If the school has limited equipment, is its use available to all students, not only the gifted or those needing basic skills assistance? |
| ___ | ___ | ___ | ___ | 9. Are all teachers adequately trained to use technology as part of their teaching? |

Lifelong Learners

The Lame Deer Technology Committee agrees that a lifelong learner is a person who, having recognized the importance of education and technology, continues to search for new and exciting ways to accomplish life's tasks. The committee is committed to:

- T Emphasizing that being a lifelong learner does not necessarily mean pursuing formal education and research.
- T The district should provide opportunities for learners other than students by designing adult evening classes that allow the community to use the technologies.

FOUNDATION SKILLS	
Competent workers in a high-performance workplace need the following:	
Basic Skills	reading, writing, arithmetic and mathematics, speaking, and listening
Thinking Skills	the ability to learn, to reason, to think creatively, to make decisions, and to solve problems
Personal Qualities	individual responsibility, self-esteem and self-management, sociability, and integrity
WORKPLACE COMPETENCIES	
Effective workers can productively use the following:	
Resources	They know how to allocate time, money, materials, space, and staff.
Interpersonal Skills	They can work on teams, teach others, serve customers, lead, negotiate, and work well with people from culturally diverse backgrounds.
Information	They can acquire and evaluate data, organize and maintain files, interpret and communicate, and use computers to process information
Systems	They understand social, organizational, and technological systems; they can monitor and correct performance; and they can design or improve systems.
Technology	They can select equipment and tools, apply technology to specific tasks, and maintain and troubleshoot equipment.

Technology Acquisition

All servers, computer and network equipment purchases must comply with the following district standards.

Hardware:

Lame Deer has selected PC's using Windows as the universal operating system. It is of the opinion of the School-to-Work Committee and the staff that students will be provided greater work skill development as the majority of small businesses and government (both Tribal and Federal) in our small community and most of those in the surrounding area use the Windows platform. On most occasions when a computer is available in the home, it is more likely to be a PC than an Apple due to cost and work comparability preferences of parents.

Servers:

The district currently has seven servers. One is for MAPS testing and Follett Library Program, one is for reading programs, one handles the Accounting system used by the administration, one is the Domain Server, another is the high school data server, one serves as the Harcourt Math server, one handles the Special Ed IEP programs and is a student file server, one handles the elementary reading programs.

Workstations:

Each classroom will be equipped with: PC-based computers with minimum processor of 1.5 GHZ, 1GB RAM, 250 gigabytes hard drive, CD/DVD ROM, internet access, one printer and appropriate computer desks with conventionally located UL-approved surge protectors.

Software:

Lame Deer School District will offer support to staff using the following software packages:

Desktop Operating Systems:	Current Windows Operating System
E-Mail clients:	Google Organizational Account
Browsers:	Internet Explorer, Firefox, and Safari for Apples
Core Software:	Microsoft Office 2010 Enterprise Edition
Supplemental Software:	Network Based Learning Programs
School Information System:	Infinite Campus

Phone:

Each classroom is equipped with a telephone that has voice mail, and plans are to put in separate voice mail for a homework hotline.

Time Line/Acquisition Plan

2012-2013

Date	Activity	\$
School Year	Toner and Supplies	\$12,000.00
All Yr	Upgrade and download Infinite Campus	4000.00
May	Renew Infinite Campus Licensing	\$4,000.00
All Yr	Professional Development	\$3,000.00
All Yr.	Purchase Technology Equipment Apple and PC	\$169,000.00
School Year	Maps Testing	\$6,000.00
TOTAL Expenditures for 2012-2013		\$198,000.00

2013-2014

Date	Activity	\$
7/01	Renew Infinite Campus Licensing	\$4,180.00
July	Conduct updated inventory of K-12 technology	
7/05	Update computers and Laptops	\$50,000.00
August	Provide Workshop on Infinite Campus	\$4,500.00
School Year	Toner and Supplies	\$12,000.00
School Year	Maps Testing	\$6,000.00
Fall	Distribute old computers to classrooms and sell to public	
August	Purchase Printers	\$3,500.00
Total Projected Expenditures 2013-2014		\$80,180.00

2014-2015

Date	Activity	\$
7/01	Renew Infinite Campus Licensing	\$3,400.00
Summer	Conduct updated inventory of K-12 technology	
School Year	Update Computers and Laptops	\$50,000.00
August	Provide Smart Board Training	\$4,500.00
Fall	Distribute old computers to Classrooms and sell excess to public	\$3,500.00
August	Provide Workshop on Infinite Campus by technology staff	
School Year	MAPS Testing NWEA	\$6,000.00
School Year	Purchase Projection Devices	\$10,000.00
School Year	Toner and Supplies	\$12,000.00
	TOTAL Projected Expenditures for 2014-2015	\$89,400.00

Evaluation

Ongoing monitoring and evaluation are critical to the success of the districts' technology plan. Monitoring strategies will include yearly physical inventories of the status of infrastructure and technology components, surveys of professional staff regarding technology use and integration, and formal and informal observations of students utilizing technology. These data will be synthesized and compared to the goals in order to determine progress toward the technology plan. Based on the conclusion drawn from these ongoing evaluations, the districts may choose to modify the plan to align it to current needs and circumstances.