Morgan County R-1 School District

Technology Plan

March 2016

Morgan County R-1 School District
Technology Committee

Curriculum Integration
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Morgan County R-I School District Philosophy

- Give each student the opportunity to discover and develop his or her creative abilities.
- Help students learn to think.
- Maintain discipline, emphasize fundamentals, and motivate students to be life-long learners and guide habits and attitudes.
- Give students the opportunity to acquaint themselves with the greater thinking, writing, arts, science, history, and language skills of the world.
- Give each student the fundamental knowledge of the economic facts of life; how to cope with them through an understanding of how natural resources and human effort supply the needs of mankind; provide work skills so that they may support themselves.

Technology Vision Statement

It is the responsibility of the Morgan County R-I school district to prepare students for the constantly changing information age; technological society. In order to achieve this, both staff and students need to develop competencies in the use of and application of all available technology. This dictates the need of students and staff to have access to and knowledge of technological skills needed in a modern society.

Goals

- Technology will be used to enhance and enrich learning opportunities for students in all curriculum areas.
- Technology will be used to increase the effectiveness of instruction.
- Technology will be viewed as tools for learning and working in our modern society, not as ends in themselves.
- All technology instruction will enhance student learning and performance.
- Technology can and will be used to enhance communication.
- Student access to technology will be at a level which allows for educational effectiveness.

- Technology will be used to prepare students for college and/or career readiness.

Curriculum Integration

The Morgan County R-1 School District has clearly designated content standards in language arts, mathematics, science, and social studies. By providing the appropriate infrastructure, hardware, software, and training, technological advancement will help our teachers provide learning experiences that will foster mastery of the student achievement goals. Multiple forms of assessment are used to measure progress.

The following information gives an overview of how technology will be used to foster student achievement in each subject area.

All K-12 curriculum will be written and/or revised to implement the Missouri Learning Standards.

SOCIAL STUDIES

The social studies curriculum lends itself well to the use of technology. Present technology not only links students to others of different ethnic and cultural backgrounds, but also gives students the chance to experience history in the making and to relive history by interacting with historical simulations. Students share information with other students all over the globe; learning about each other's cultures. They participate in interactive web expeditions. There are also programs that allow students to create and interpret databases for regions of the United States or nations of the world. Students use spreadsheets to plot population information or voting results. They utilize computer software to create timelines and flow charts for historical events, presidential campaigns, legislative or political processes. Different types of governments and geographical locations are studied, compared and contrasted as students do research on the Internet and use online databases.

Student achievement in social studies is formally assessed locally and through state assessments.

TECHNOLOGY

Technology standards and benchmarks will be developed based on NETS standards. The standards and benchmarks should be integrated into the content areas; they are not a separate curriculum. Instruction in technology productivity tools, communication tools, and keyboarding skills will be taught to all students at grades 5 and 6. We should begIn assessing the technological literacy of all grade 8 students in 2016. Technology safety, etiquette as well as best practices will be emphasized in all grades K-12.

SCIENCE AND TECHNOLOGY

Our district K-12 Science Curriculum will be revised to implement the new Missouri Learning standards. Teacher pedagogy will utilize various technological instruments, the students will utilize appropriate technology to learn science, and the student will investigate the impact of technology on society and the environment. The district will train and implement project lead the way in grades 5-8 with a desire to move the program into the High School, as well as lower elementary.

Additionally, online resources provide students with the opportunity to use technology as a tool in scientific research resulting in authentic learning.

ENGLISH LANGUAGE ARTS

The Morgan County R-1 school districts K-12 curriculum will be revised to the new Missouri Learning standards. Teacher pedagogy in the language arts area will focus not only on research but will include peer editing, collaboration as well as the use of a variety of software. The software used to support the curriculum currently includes: *Smart Keys / Type to Learn;* Multimedia software; online databases for research; word processing software; textbook software; K-6 Google programs.

MATHEMATICS

Our district K-12 mathematics curriculum will be revised to the new Missouri Learning standards. Integration of technology will be carefully done for all grade levels including use of calculators and mathematics software programs. Problem solving is the focus of the mathematics curriculum. Students will be tasked with using technology in exploring geometric properties and figures. Software programs are available that give students opportunity to investigate problem solving strategies with immediate feedback. Elementary students use spreadsheets and graphing software to enhance mathematics development. Graphing calculators and spreadsheets enable middle school and high school students to extend their learning experiences including real world applications.

Curriculum Integration 2016/17 Goals:

- Begin 1 to 1 initiative
- Insert basic technology operations, concepts and safety into elementary curriculum
- Create more Science, Technology, Engineering and Math (STEM) opportunities for students.
- Create and schedule technology productivity, communication and research classes no later than grade 5.

Professional Development

We will continue to provide professional development opportunities for district employees. The teachers are encouraged to explore and initiate technology training to meet their needs. Instructional coaches, principals and teacher leaders will be used as resources for implementation as well as training. Outside resources will be utilized as needed.

Professional Development 2016/17 Goals:

- Task the professional development committee to design a way to use early out Wednesdays to drive more technology Professional Development
- Ensure technology professional development as new textbooks are chosen
- Ensure training in the Project Lead the Way
- Create more opportunities for teachers to select, develop and implement technology rich lessons.
- Utilize instructional coaches to provide professional development.

Technology Distribution and Infrastructure

Each year the Technology Director will do an assessment of the network services, hardware, and software that are needed to improve education services. This assessment will be presented to the technology committee. This is done annually to ensure that it is sufficient to keep up with district needs.

Technology distribution and Infrastructure 2016/17 Goals:

- Create replacement schedule utilizing grant depreciation guidelines
- Update teacher desktops
- Uniform software and operating systems
- Purchase chromebooks for 1 to 1 initiative and increase access to other grade levels
- Maintain or increase technology staffing
- Update computer labs with more capable machines

Grants and Vocational Enhancement Grants

Due to the cost of technology, resources outside our normal funding must be researched. This could be done on an individual, classroom, building or district level. Such grants will all have the common goal of securing resources that will increase the district's ability to provide technology to students. Grants can be submitted only with the approval of the Superintendent of Schools and/or Board of Education. District resources cannot be promised without prior permission.

Communication

Technology of the 21st century has changed how we communicate. As a district we must use technology as a public relations tool that fosters widespread communication between buildings and staff, home and school, school and community, and school and world in addition to promoting quality learning outcomes.

8th grade Student Technology Literacy Proficiency Checklist

Basic Operations and concepts	
1	Open a file or application
2	Create and save a document
3	Open an existing document
4	Make changes to (font style, size, type, etc.)
5	Print a document
6	Spell-check a document
7	Cut, copy and paste within a document
8	Cut, copy, and paste between documents
9	Insert a clip art into a document
10	Delete a document or file
11	Access information using a browser through the World Wide Web
12	Navigate within a Web site to locate information
13	Use a search engine within an application or Web page
14	Manage files (save to specific locations, change locations)
15	Organize and paste information into a table or chart
16	Create folders for organizing documents
17	Create and organize Internet favorites
18	Use an electronic card catalog.
19	Search for information using online research tools (Databases)
Social, Ethical and Human Issues	
1	Create a bibliography citing print and electronic resources used in the creation of a document
2	Evaluate website for currency, author, authority, relevance
Technology productivity, communication tools	
1	Look through several Web sites to identify, compare and summarize information on a particular topic
2	Create a spreadsheet document and use the sort and filter of a spreadsheet application to locate and analyze information (Excel)
3	Create or contribute to a database (such as a database of book recommendations) (Excel or Access)
4	Write a paper using a word processor (Microsoft Word)
5	Create a Desktop publishing document (Publisher)
6	Develop a report using presentation software (PowerPoint)
7	Design a poster to support a message or theme (Publisher)
9	Evaluate reliability of information sources
Technology Research tools	
1	Access a variety of resources such as: card catalog, on-line databases, and web sites for information to write a report
2	Use internet and social media is a safe as well as appropriate manner.
Technology Problem-Solving and Decision making Tools	
1	Student will be presented with a problem appropriate for their level and develop a course of action based on an established criteria as to questions to be asked and answered, resources need to accomplish task and time line