Pennsylvania Department of Education

Commonwealth of Pennsylvania
Department of Education
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Educational Technology Report

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Mission

The mission of the Jefferson-Morgan School District is to provide a learning environment that permits students to reach their full potential. To this end, we believe that the Jefferson-Morgan School District EXCELS!--Educational eXcellence + Caring Environment + Leadership = Success!

Vision

- Matters related to literacy will dominate program development plans.
- A K-12 perspective will be emphasized in the curriculum with a focus on academic rigor across the school district.
- Instructional expectations will be influenced by the K-12 perspective.

Shared Values

- The academic focus of the educational program must be emphasized for all students.
- Individuals reach their fullest potential in a positive and safe environment where expectations are high and multiple forms of student assessments are used to promote upward growth in academic performance.
- Everyone learns at different rates and in different ways.
- Education is a team effort involving home, school and community.
- A caring and supportive environment will enhance the social maturity of all students and enhance school district tactics to address negative attitudes of students toward academic excellence.
- The school climate should contribute to the development of pride in the school by students, the professional staff and community.
- Education provides the foundation for success.

Needs Assessment

Reflections

There are currently no reflections selected for this section.

In recent years, Jefferson-Morgan School District has taken strides to update the existing technology to meet today's standards. The districts' two buildings are hard wired with Category 5 or greater cabling and connected via fiber optic cable. The Elementary has recently been renovated (2000) and new network backbone was installed. The building entrance is maintained by a Cisco Catalyst 4000 Series switch that feeds three data closets located in the Elementary building that are occupied by a mix of Cisco 3550 Series, 3500 XL, and 3Com SuperStack switches via multimode fiber optic cable. All the aforementioned models can be controlled and configured remotely, minus the 4000 Series and the 3Com SuperStack. The entire building is cabled with Category 6 cabling for data. The school is equipped with classroom intercom systems and classroom telephones that allow for classroom-to-classroom communication, the ability to dial to an outside number, and the ability to communicate with the Elementary office.

The Jefferson-Morgan High School/Middle School network consists of a mixture of 10MB hubs and 100MB switches including the Cisco 2948 Series, 3550 Series, Dell PowerConnect 2500, 3Com SuperStack, and 3Com Hubs. Switches are connected via Category 5, Category 5e, Category 6, and multimode fiber optic cable. Remote configuration and maintenance can only be

done on the Cisco equipment. Cabling has been done on an as needed basis and not always meeting specifications. Network connection speeds can be unpredictable at times depending on network traffic due to wiring concerns, switch placement, and lack of a true fiber optic backbone. Classroom communication is limited to intercom communication only.

All connections are terminated and labeled in the classroom and data closets. Our district maintains a 100MB Microwave circuit, 10MB Internet connection, and an Internet 2 subscription provided by Intermediate Unit I that was implemented at the begining of the 2006-2007 school year. This connection replaced our fractional T1 connection to better meet our needs.

Jefferson-Morgan School District recently upgraded its end-user equipment by leasing one hundred and fifty desktop computers that replaced obsolete equipment. Past practice had illustrated that Jefferson-Morgan had purchased computers outright. Continuing this methodology posed a serious challenge to administration in keeping an effective life cycle management plan, not to mention making budget forecasting nearly impossible. The more time a computer remains in service, the Total Cost of Ownership of that machine increases. Leasing allows us to utilize systems that are under warranty and still meet software system requirements, return them when they become obsolete, then refresh our technology to keep pace with current technological trends. Budgeting becomes easier as the line item becomes and fixed figure for the duration of the lease.

Jefferson-Morgan Jr./Sr. High School has taken advantage of the flexibility of a wireless networking environment in the form of a mobile computer lab that facilitates 19 laptop computers. This mobile lab is available to classes throughout the day to alleviate the strain on scheduling time in fixed computer labs. It allows teachers and students to remain in a classroom setting and have access to numerous educational activates on the web. The Jefferson-Morgan Sr. High School was awarded the Classrooms for the Future grant with year one begining in 2007-2008 and implemented in the Mathematics department in grades 9-12. This grant provided the math department with 83 student laptops and 3 staff laptops.

Jefferson-Morgan School District recognizes the need to stay informed on the development of new technologies and innovative uses of those technologies. We are looking forward to implementing digital projectors and interactive whiteboards into the classroom. This will allow staff members to display powerful presentations and multimedia rich content from their desktop computer from educational resources such as the Discovery Educators Network and the Library of Congress. Interactive whiteboards

The Jefferson-Morgan Elementary and Jr./Sr. High School plans to take advantage of the new CPS (Classroom Performance System) technology and feel this tool will be invaluable in measuring student performance immediately. This tool allows for active learning, discussion, and instructor feedback in the classroom. This provides a non-threatening environment allowing all students to participate. This automated assessment feature lets students answer test questions at their own pace while keeping track of answers and grades behind the scenes.

Video conferencing has become part of the mainstream education providing students with distance learning opportunities that would never be possible without technology. The disitrcts' shared Polycom unit as afforded our students a virtual autopsy from The Ohio State University Medical Center, Statisitcal Analysis from the Baseball Hall of Fame, Cooking Demonstrations from or local Career and Technology Center, and Space Exploration activities prvided by NASA. It would be impossible for our district to provide these opportunites to our students given our current operating budget.

Subscriptions powerful information sources such as District Administration Magazine and eSchool News also contribute to the researching of new and innovative products. These publications examine products and discuss possible integration methods. Regular Technology Council meetings at Intermediate Unit I provide an open forum between Technology Coordinators in the Intermediate Unit for technology integration suggestions and roadblocks that have been encountered along the way. The Technology Coordinator also attends the Pennsylvania Educational Technology Expo and Conference (PETE&C) annually.

Goals and Strategies

Goal: FOUR-YEAR GRADUATION RATE (for districts and schools that graduate seniors)

Description: Graduate rate will meet an 80% threshold and/or show growth.

Strategy: Community Involvement

Description: Promote focused community involvement in the academic development of students

Activity: Classroll.com

Description: Emphasize and promote the usage of the online Student Grading System of Classroll.com that allows students and parents "real-time" data on student progress throughout the school year.

Person Responsible	Timeline for Implementation	Resources
Swinchock, Adam	Start: 1/1/2007	$20,800.00

Finish: Ongoing

Status: Complete

Date	Comment
5/5/2008	Classroll.com is availible to parents of district students in grades 1-12 to monitor assignments and provide real-time classroll performance information. Students grades 7-12 are provided with login credentials so they may monitor their along with thier parents to promote ownership of the learning and assesment process.

Strategy: Engaging Students in Learning

Description: Provide a variety of courses that are challenging and engaging.

Activity: CPS Integration

Description: Purchase and Install CPS Systems into the Elementary and High School to engage students and measure retention using the testing feature with provides immediate feedback.

Person Responsible	Timeline for Implementation	Resources
Swinchock, Adam	Start: 1/1/2007 Finish: Ongoing	$13,450.00

Status: In Progress — Upcoming

Date	Comment
5/5/2008	A CPS Unit from eInstruction has been implemented in the 5th Grade Science class in the Elementary. The 2007-2008 school year was the beta test to prove classroom methodologies for the CPS and guage a change student achievement and classroom interaction. This unit will be availible for all classes grades 4-6 for the 2008-2009 school year. Because of the success of the CPS in the Elementary, the Mathmatics Department will implement a CPS system from Promethean during the 2008-2009 school year to be used from grades 9-12.

Activity: Interactive Classrooms

Description: Purchase and install interactive whiteboards and projectors that are connected to staff computers into classrooms to promote the differentiated instruction

Person Responsible	Timeline for Implementation	Resources
Swinchock, Adam	Start: 1/1/2007 Finish: Ongoing	$19,450.00

Status: In Progress — Upcoming

Date	Comment
5/5/2008	Interactive whiteboards and projectors have been installed in a number of classrooms in the High School and Middle School. While the project has not touched all classrooms yet, we anticipate this project being completed by the 2010-2011 school year. All elementary classroom staff computers are attached to LCD televisions that allow the teacher to display digital content to the entire classroom.

Strategy: Implement a High Performance System

Description: Emphasis on exceeding the graduating rates by implementing a high performance system to prepare students for success.

Activity: Benchmark Member Center

Description: Utilize the 4Sight Benchmark On-Line Member Center to analyze Benchmark tests, identify strengths and weaknesses, and make adjustments

Person Responsible	Timeline for Implementation	Resources
Swinchock, Adam	Start: 1/1/2007 Finish: Ongoing	$22,500.00

Status: Complete

Date	Comment
5/5/2008	System is in place for all grade levels participating in the Benchmark Testing program. Reports and data are availible to administration and faculty members to analyze data.

Activity: OnHand Schools Data Management System

Description: Implement OnHand Schools for Administration and Faculty use to monitor students achievement on a loca, state, and national level. Use this program to conduct curriculum mapping for the district grades Pre-K-12. Also utilize the programs lesson planning feature to show classroom activities in relationship to state standards and anchors. Monitor student, attendance, grades, and discipline, and Individualized Education Plans in one conveinent location.

Person Responsible	Timeline for Implementation	Resources
Swinchock, Adam	Start: 1/1/2007 Finish: Ongoing	$17,000.00

Status: Complete

Date	Comment
5/5/2008	Made possible by a grant from Intermediate Unit I. The program is hosted at

Intermediate Unit I and accessible to all administration and faculty members. The program will be moved to the district site for the 2008-2009 school year for connectivity reasons.

Activity: Online Professional Communities and Learning Management Systems

Description: Configure Moodle with Professional Development Communities for Curriculum Development, Data Analysis, and Lesson Plan Peer Review.

Person Responsible	Timeline for Implementation	Resources
Swinchock, Adam	Start: 1/1/2007 Finish: Ongoing	$4,843.00

Status: In Progress — Upcoming

Date	Comment
5/5/2008	Testing of the district Moodle server is currently underway to provide a proof of concept for our learning environments.

Goal: Increased Network Bandwidth and Internet Connectivity

Description: To increase bandwidth in a cost efficient manner, increase commodity Internet speed and have access to Internet 2

Strategy: JMSD Infrastructure & KITS Regional Area Network

Description: Join the KITS Regional Area Network through the Intermediate Unit I providing a 100MB transport connection, 10MB Internet Connection, and connection to Internet2 during the 2007-2008 school year.

Activity: Cabling Infrastructure

Description: Update the Infrastructure in the Jr/Sr High School to Category 6 Cable with a Fiber Optic Backbone

Person Responsible	Timeline for Implementation	Resources
Swinchock, Adam	Start: 1/1/2007 Finish: Ongoing	$34,000.00

Status: In Progress — Upcoming

Date	Comment
5/5/2008	Cabling Infrastructure for the Mathmatics Department has been upgraded in the High School. The Elementary was updated during the renovation so now new updates are needed there. The updates for the English Department will begin in June 2008. The Social Sciences, High School Office, and Business Computer labs will be done during the 2008-2009 School Year.

Activity: Internet 2

Description: Use the educational network Internet 2 to take advantage of discussion groups, research initiatives, and virtual field trips and simulations.

Person Responsible	Timeline for Implementation	Resources
Swinchock, Adam	Start: 1/1/2007 Finish: Ongoing	$24,000.00

Status: Complete

Date	Comment
5/5/2008	This Project has been completed by joining the KITS Regional Area Network through Intermedite Unit I

Activity: Network Equipment

Description: Update the network infrastructures mix of 10 MB hubs and 100 MB switches to 100/1000MB switches connected via a fiber optic backbone

Person Responsible	Timeline for Implementation	Resources
Swinchock, Adam	Start: 1/1/2007 Finish: Ongoing	$40,000.00

Status: In Progress — Upcoming

Date	Comment
5/5/2008	Networking equipment has been upgraded in the core server room, Mathematics, and English wing of the Jefferson-Morgan Jr./Sr. High School to accomidate the increased network demand. The Science, English, Social Sciences, and Miscellaneous classrooms will begin in June 2008.

Activity: Wireless Campus

Description: Install Cisco Aeronet Wireless access point campus wide to allow for wireless connectivity and additional mobile computer labs

Person Responsible	Timeline for Implementation	Resources
Swinchock, Adam	Start: 1/1/2007 Finish: Ongoing	$10,500.00

Status: In Progress — Upcoming

Date	Comment
5/5/2008	Wirelesss Access Points have been added to the core Server Room, Administration Office, the Mathmatics and English wing of the High School, and the Elementary Office and the Library. Some of these adaptions have been done to meet the requirements of the Classrooms for the Future Grant Initiative. The remaining sections of the High school will be completed during the 2008-2009 school year. Elementary and Middle School will be covered in the 2009-2010 school year.

Goal: MATHEMATICS

Description: At least 56% of all students will be proficient in Mathematics, as measured by the annual state-wide PSSA assessments.

Strategy: Effectively Implement and Integrate Technology

Description:

Activity: Carnegie Learning

Description: Implement and utilize the Carnegie Learning Cognitive Tutor Integrated I, Integrated II, Integrated III, and Bridges to Algebra software program.

Person Responsible	Timeline for Implementation	Resources
Swinchock, Adam	Start: 1/1/2007 Finish: Ongoing	$31,200.00

Status: Complete

Date	Comment
5/5/2008	Carnegie Learning Cognitive Tutor and Bridge to Algebra have been successfully implemented in grades 9-12. The district has been working with department mebers to discuss the possibility of also implementing Bridge to Algebra in the Elementary at the

sixth grade level

Goal: READING

Description: At least 63% of all students will be proficient in Reading, as measured by the annual state-wide PSSA assessments.

Strategy: Differentiated Instruction

Description: Provide differentiated instruction for all students which exceeds the mandates of No Child Left Behind.

Activity: Scientific Learning FastForWord

Description: Software based on brain research to help struggling readers.

Person Responsible	Timeline for Implementation	Resources
Swinchock, Adam	Start: 1/1/2007 Finish: Ongoing	$28,400.00

Status: Complete

Date	Comment
5/5/2008	The Fast ForWord program provided be Scientific Learning has been implemented in grades K-6 for all students. The program is also utilized by Learning Support staff members in their classrooms in grades 7-12.

Goal: SCIENCE

Description: Students will meet the defined state performance targets on the PSSA science assessment.

Strategy: Robotics

Description: Robotics instruction provides students with an engaging, hands-on opportunity to explore challenging aspects of science.

Activity: Lego Robotics

Description: Install and utilize the Lego robotics software and hardware packge for differentiated instruction.

Person Responsible	Timeline for Implementation	Resources
Swinchock, Adam	Start: 1/1/2007 Finish: Ongoing	$14,800.00

Status: Complete

Date	Comment
5/5/2008	The LEGO Robotics Program has been implemented in a Secondary Science Course to introduce students to the field of robotics and simple computer programs using graphical user interfaces.

Strategy: Science Technology Integration

Description: Promote the use of technology in the Science Program. Utilize technology to capture, analyze, and present data from experiments conducted in district laboratories

Activity: PASCO Science Software

Description: Implememet the PASCO hardwre and software packages in Biology, Chemistry, Applied Sciences, Physics, and Earth Sciences to engage students

Person Responsible	Timeline for Implementation	Resources
Swinchock, Adam	Start: 1/1/2007 Finish: Ongoing	$2,300.00

Status: Complete

Date	Comment
5/5/2008	The PASCO Scienctific software has been implemented in Chemistry and Physics laboritories in the High School. This software allows studentd to preciesely capture data from experiments conducted in these labs and then anlayze, present, and formulate colunclusions based on the data collected.

Budget

Potential Funding Distribution

Funding Source	2007-2008	2008-2009	2009-2010	Total
010 - ADMINISTRATIVE BUDGET	$12,193.00	$17,150.00	$25,750.00	$55,093.00
020 - CURRICULUM DEVELOPMENT AND INSTRUCTIONAL IMPROVEMENT SERVICES	$7,500.00	$7,500.00	$7,500.00	$22,500.00

040 - INSTRUCTIONAL MATERIALS SERVICES	$12,000.00	$20,200.00	$20,400.00	$52,600.00
211 - Tutoring	$7,500.00	$7,700.00	$7,900.00	$23,100.00
Other	$18,500.00	$18,500.00	$0.00	$37,000.00
Grand Total	**$57,693.00**	**$71,050.00**	**$61,550.00**	**$190,293.00**

Goal: FOUR-YEAR GRADUATION RATE (for districts and schools that graduate seniors)
Graduate rate will meet an 80% threshold and/or show growth.

Community Involvement	**2007-2008**	**2008-2009**	**2009-2010**	**Total**	**Funding Source**
Classroll.com	$5,050.00	$5,150.00	$5,250.00	$15,450.00	010 - ADMINISTRATIVE BUDGET
Engaging Students in Learning	**2007-2008**	**2008-2009**	**2009-2010**	**Total**	**Funding Source**
CPS Integration	$1,450.00	$3,000.00	$3,000.00	$7,450.00	010 - ADMINISTRATIVE BUDGET
Interactive Classrooms	$1,450.00	$4,000.00	$4,000.00	$9,450.00	010 - ADMINISTRATIVE BUDGET
Implement a High Performance System	**2007-2008**	**2008-2009**	**2009-2010**	**Total**	**Funding Source**
Benchmark Member Center	$7,500.00	$7,500.00	$7,500.00	$22,500.00	020 - CURRICULUM DEVELOPMENT AND INSTRUCTIONAL IMPROVEMENT SERVICES
OnHand Schools Data Management System	$0.00	$0.00	$8,500.00	$8,500.00	010 - ADMINISTRATIVE BUDGET
Online Professional Communities and Learning Management Systems	$4,243.00	$0.00	$0.00	$4,243.00	010 - ADMINISTRATIVE BUDGET
Subtotal	**$19,693.00**	**$19,650.00**	**$28,250.00**	**$67,593.00**	

Goal: Increased Network Bandwidth and Internet Connectivity
To increase bandwidth in a cost efficient manner, increase commodity Internet speed and have access to Internet 2

JMSD Infrastructure & KITS Regional Area Network	**2007-2008**	**2008-2009**	**2009-2010**	**Total**	**Funding Source**
Cabling Infrastructure	$6,000.00	$4,000.00	$4,000.00	$14,000.00	040 - INSTRUCTIONAL MATERIALS SERVICES
Cabling Infrastructure	$0.00	$5,000.00	$5,000.00	$10,000.00	010 - ADMINISTRATIVE BUDGET
Internet 2	$6,000.00	$6,000.00	$6,000.00	$18,000.00	040 - INSTRUCTIONAL

					MATERIALS SERVICES
Network Equipment	$15,000.00	$15,000.00	$0.00	$30,000.00	Other
Wireless Campus	$3,500.00	$3,500.00	$0.00	$7,000.00	Other
Subtotal	**$30,500.00**	**$33,500.00**	**$15,000.00**	**$79,000.00**	

Goal: MATHEMATICS
At least 56% of all students will be proficient in Mathematics, as measured by the annual state-wide PSSA assessments.

Effectively Implement and Integrate Technology	**2007-2008**	**2008-2009**	**2009-2010**	**Total**	**Funding Source**
Carnegie Learning	$0.00	$10,200.00	$10,400.00	$20,600.00	040 - INSTRUCTIONAL MATERIALS SERVICES
Subtotal	**$0.00**	**$10,200.00**	**$10,400.00**	**$20,600.00**	

Goal: READING
At least 63% of all students will be proficient in Reading, as measured by the annual state-wide PSSA assessments.

Differentiated Instruction	**2007-2008**	**2008-2009**	**2009-2010**	**Total**	**Funding Source**
Scientific Learning FastForWord	$7,500.00	$7,700.00	$7,900.00	$23,100.00	211 - Tutoring
Subtotal	**$7,500.00**	**$7,700.00**	**$7,900.00**	**$23,100.00**	
Grand Total	**$57,693.00**	**$71,050.00**	**$61,550.00**	**$190,293.00**	

Staff Development

Professional Development classes will be conducted through In-service days, Train-the-Trainer Sessions, After School Workshops, and Web Based Self-Paced Instruction. The Technology Administrator will be charged with conducting the training during all session other than Train-the-Trainer workshops. These workshops will be provided and led by the specific program or software vendor. Professional Development can be either optional or mandatory dependant on the topic. For example, Classroll.com training and instruction will be a mandatory function due to the fact the scope of the project is district wide. Workshops pertaining to a software program such as Kid Pics would be optional as it pertains to a certain age group. For most optional workshops, Act 48 credit is offered to provide incentives for attendance. Sessions that are conducted on computer hardware or software may offer incentives to the teacher to become a “pilot” program in their classroom and assist in curriculum development for said technology. Allowing the faculty to take ownership of a project such as this is extremely motivating and rewarding to all parties involved.

Although our staff is eager to be immersed in these programs, financial constraints due to budget cutbacks and the time constraints to a demanding teaching schedule make professional development a difficult task. Time periods that could be spent on technology training and re-training must be spent on student data analysis and strategic planning.

Jefferson-Morgan encourages staff members to attend workshops and seminars outside the district. Regular seminars and hands-on experiences are available at local universities and

colleges such as Journey of the American Mind from Waynesburg College. Professional development is available at our Intermediate Unit where courses and workshops are held on a daily basis and on a variety of subjects. Distance learning opportunities will be scheduled in the form of webinars from the Pennsylvania Department of Education and the Discovery Educators Network. Staff members have also participated in the past in a Technology Camp during the summer months on a voluntary basis. This helps increase their skills in Internet Research, basic computing, unitedStreaming, Microsoft Office 2003 Professional, and other various software packages. This camp is conducted for teachers, by teachers and allows them to better incorporate technology into their lessons and projects.

Jefferson-Morgan School District has implemented Technology Teams in both the High School and Elementary School that aid faculty members in technology integration. These are staff members that are considered advanced in computer and technology usage and can assist staff on a daily basis. Technology Team members provide instructional technology strategies to staff members and advise faculty members when necessary.

Monitoring

The Technology Coordinator is responsible for the monitoring of all education technology equipment and ensures that it is functioning properly and used as it was intended. Building principals will be charged with ensuring that technology is being used appropriately and effectively in the classroom. Meetings with individual teachers to discuss specific lessons, classroom integration, creation of interactive activities, and project needs will be conducted faculty wide. A post-activity questionnaire will be developed to rate the effectiveness of the integrated lesson over a traditional model.

Evaluation

Interviews and Internet surveys using Zoomerang will be conducted during each grading period to gauge the success of technology integration. Discussion groups will be formed consisting of administration, staff, and faculty to review technology integration, make recommendations for changing existing technologies, and explore new technologies as they are introduced. Online message boards will be created to discuss technology trends and applications to impact students and the learning process. Online message boards allow for flexible meeting times without time and facilities constraints. Effectiveness of software packages designed to address educational needs with be assed based on faculty recommendations, fluctuation of grades in the local scoring system, and state standardized tests.