
Pennsylvania Department of Education



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF EDUCATION
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Educational Technology Plan

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Entity: Bermudian Springs SD

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Core Purpose

Mission

The mission of the Bermudian Springs School District, in partnership with all parents, the community, and the Commonwealth of Pennsylvania, is to ensure that each student seeks academic excellence as a self-directed, lifelong learner and personal excellence as a productive, responsible, respectful citizen who is able to contribute successfully in a global society.

Vision

We see a school district where:

- All parents, community members, and school staff form a partnership to provide a comprehensive and challenging educational environment for all students;
- All diverse learning needs are recognized and addressed in a caring, sensitive, and creative student-centered learning environment;
- All students effectively communicate, problem solve, and demonstrate higher-order thinking skills;
- All students develop intellectually, morally, socially, and physically;
- All students succeed in a changing, technological world;
- All students learn to cooperate in a diverse and multi-cultural world;
- All parents, community members, and school personnel model the learning processes and behaviors expected of students;

All staff is committed to and involved in personal and professional growth.

Shared Values

We believe that:

- Research-based programs should be used whenever possible.
- Decisions should be based upon data obtained from student responses and assessments.
- Staff should make every effort to meet student needs.
- Technology should be incorporated into daily instruction and used by staff and students to accomplish school-wide and individual student academic goals.
- Learning should be supported by school personnel and parents to achieve to the best of their ability.
- Efforts should be made to help all students feel safe, secure and comfortable in the school community.
- Student effort should be encouraged and promoted.

Needs Assessment

Some new developments in technology that have emerged will have a significant impact on our District in the years to come. Through our local Intermediate Unit (Lincoln IU) our district is participating in Act 183 E-Fund grant which will provide increased telecommunications services/connectivity to the Internet, other districts and the LIU. This is an all fiber network with 10MB of layer 2 Ethernet connectivity to each district hub site from the LIU aggregations points and guaranteed 10MB to the Internet. The advantages of this increased broadband will allow

us to explore the following uses which were not available in the past:

Blog & Wiki Server - blogs allow individuals to post journals on the web that can be viewed by others thus generating discussions. Wikis allow multiple authors to post, edit, and delete information freely on the web. They are terrific ways for students and teachers to collaboratively create content.

Blackboard - is an online content management system, essentially courseware delivered over the web. Most universities use blackboard and it is also a great way to reach students who, for one reason or another, cannot participate in traditional education. Blackboard use is a great way to blend traditional teaching with virtual learning.

Synchronous Distance Learning Tools - often called webinars, are online programs that are used here to enable virtual meetings. Webinars are a way for students to meet and interact with other students around the network. They allow for collaboration and sharing of information across the Internet. Teachers can pose questions to poll student understanding and create breakout sessions where students work in smaller groups and then join the main group.

Storage and Streaming Servers - Storage servers house the electronic information which is backed up at regular intervals. Streaming servers are used to deliver streamed data that comes across the computer in a continuous feed of information. This application is mainly used by teachers for instructional videos where they can be viewed in part or whole.

Video Conferencing - is a virtual conference that takes place electronically over a network, where each participant has a camera, microphone and speakers. Individuals can interact with others both audibly and visually. This technology is used effectively in delivering distance education to students who cannot physically be in the same location as the instructor. Video conferencing can also be used to allow professional development for staff.

Internet2 - is a consortium of universities and some corporations whose purpose is to focus on research and education. The materials are delivered through new technologies over a high speed network. This connection would allow students in our classrooms to be connected to resources that otherwise are not available and would allow immediate access to experts. Class to class collaboration around the country and world are also readily accessible.

Portal Development - is a service that would be available which provides multiple services from one spot. The portal can be thought of as a "one stop shop" where students and teachers would log in through the portal site and then have access to all the services and applications without having to log in again. The portal provides students and teachers with ease of service and it saves time but eliminating multiple log-ins.

Digital Tools & Software - through the increased broadband, we can expose our students to a wide variety of tools and softwares such as; digital still cameras, microphones, Phot Shop, video software, and Adobe Illustrator.

Identified Strengths and Weaknesses:

Strengths:

- the District continues to be committed to investigate and secure technology to streamline operations as well as to improve instruction for all students
- the District employs two full time technology individuals to maintain our present system while also looking for ways to enhance it
- the staff has embraced technology and continue to utilize on both a professional and personal basis
- the District offers ongoing trainings for all staff members
- the District has an active Technology Committee which several times throughout the school year and recently they identified the following goals:
 - * develop internet course offerings for students
 - * develop distance learning capabilities

- * improve access to the Internet by students in regular classrooms through wireless systems
- * provide high level training for teachers, administrators, and staff members in technological applications
- * develop a more streamlined administrative process for the development of budgets and purchase

order system

- * expand the district's internet capabilities
- * expand the district's telecommunications
- * secure software which will allow administrators to access the district's software from remote sites
- the District will continue to explore funding sources to acquire technology such as Efund Grants,

Classrooms of the Future

Weaknesses:

- need to continue to expand the number of computers for student use across the District
- need to acquire additional teacher technology tools such as whiteboards, LCD projectors, handhelds
- purchase necessary equipment to provide distance learning
- purchase wireless systems for each of the three district buildings

Goals and Strategies

Goal: TECHNOLOGY

Description: Utilize technology to improve our curriculum offerings, instruction, and to streamline our organizational processes.

Strategy: Infuse Technology Into the Curriculum

Description: The District will engage in ongoing staff development in order to equip teachers with the tools necessary to infuse technology into the curriculum.

Use of Internet, Internet2, Distance Learning, Smartboards, Hand-helds, Plato software, Compass Learning software, Blended Schools, Performance Tracker, 4Sight assessments, PVAAS, Emetric, are just a few examples of the tools that will be utilized throughout the period of this plan.

Educational Practices: Artful Use of Infrastructure, Continuous Learning Ethic, Quality Leadership, Quality Teaching

Activity	Description	Evaluation Procedure
Multiple Uses of Technology for Instruction	<p>The District will encourage multiple uses of technology for instruction. Strategies will include but not be limited to: Blended Schools, 4 Sight On-Line Benchmark Assessments, Performance Tracker, Plato software, Compass Learning software, Internet2, Smartboards, Video Streaming, Hand-helds, and Classrooms of the Future.</p> <p>Professional development opportunities will continue to be offered for staff in a variety of areas related to technology.</p>	<p>Data collected on student usage of various software programs. Staff use of smartboards, etc. for classroom use. PSSA growth towards NCLB goals</p>
Person Responsible	Timeline for Implementation	
Paul Healey	Start	7/25/2006
	Finish	n/a
	Resources	
	\$0.00	

Goal: UTILIZE DATA TO DRIVE INSTRUCTION

Description: The District will utilize benchmark testing, PSSA results, and other locally administered assessments in order to make informed decisions about instruction. By knowing each student's strengths and weaknesses, teachers will be able to use data to differentiate instruction for all students.

Strategy: A. Investigate and acquire a student data warehouse system

Description: The District will research and purchase a student data software program that will meet its needs. All local and state data will be programmed into the system and then extracted for teacher use.

Educational Practices: Artful Use of Infrastructure, Quality Leadership, Quality Teaching

Activity	Description	Evaluation Procedure			
A. Warehouse Program Selection	The District will investigate and acquire a student data warehousing program. At this point in time, we are anticipating to purchase Performance Tracker which will allow us to store all local and state assessment data.	Did we secure a program?			
Person Responsible		Timeline for Implementation			Resources
Paul Healey		Start	6/21/2006	Finish	9/29/2006
					\$25,000.00

Activity	Description	Evaluation Procedure			
B. Staff training on data warehousing	The District will provide ongoing training for administrators and staff on the use of the newly acquired student data warehousing program.	Record of sessions offered. Use of tool by administrators and staff.			
Person Responsible		Timeline for Implementation			Resources
Paul Healey		Start	7/25/2006	Finish	n/a
					\$0.00

Strategy: B. Implement benchmark testing in the areas of reading and math for grades 3-11

Description: The district will secure online benchmark testing in the areas for reading and math for grades 3-11. After staff development, testing will be implemented for the 06-07 school year and continue for the length of the strategic plan.

Educational Practices: Quality Teaching

Activity	Description	Evaluation Procedure			
Purchase 4 Sight online testing	secure funding to purchase online testing for all three buildings				
Person Responsible		Timeline for Implementation			Resources
Paul Healey		Start	7/12/2006	Finish	n/a
					\$3,500.00

Activity	Description	Evaluation Procedure			
Train principals, teachers and students	The district will develop a plan to train the three stakeholder groups for the implementation of the benchmark assessments starting with the 06-07 school year and continuing throughout the duration of the Strategic Plan.	Did all teachers attend training sessions? Were teachers and students able to utilize the system?			
Person Responsible		Timeline for Implementation			Resources
Paul Healey		Start	7/25/2006	Finish	n/a
					\$12,000.00

Activity	Description	Evaluation Procedure			
Utilize data for instruction	Teachers will utilize the benchmark assessments in reading and math	Log of reports generated by teachers.			

	to make instructional decisions for students. Our goal is assess each student in grades 3-11 in the areas of reading and math at least three times per year. Train teachers on how to use this data to drive instruction.	Feedback from teachers about data days.		
Person Responsible	Timeline for Implementation		Resources	
Paul Healey	Start	7/25/2006	Finish n/a	\$0.00

Strategy: Continue to utilize curriculum-based assessments in grades 1-12

Description: Assessments are presently administered in grades 1-12 in non PSSA assessed areas and we plan to continue to administer and utilize the results throughout the plan.

Educational Practices: Quality Teaching

Activity	Description	Evaluation Procedure		
Enter student data into Performance Tracker	The district will enter all CBA data into performance tracker starting in the 06-07 school year.	Our evaluation will be if the data is entered correctly and we can extract it for teacher use.		
Person Responsible	Timeline for Implementation		Resources	
Ed Tech Plan Admin	Start	n/a	Finish n/a	\$0.00

Staff Development

Staff development in the Bermudian Springs School District is an on-going process. Each summer workshops are offered to enhance the technology understanding and usage of the staff. Also, several in-service days are dedicated to improving the skills of professional staff in the area of technology. Future plans include:

1. Using handhelds in the classroom
2. Utilizing Blended Schools
3. Becoming a Blended Schools teacher
4. Excel
5. Smart Boards in the classroom

Budget

Summary: Potential Funding Distribution

Funding Source	Year 1	Year 2	Year 3	Total
050 - CONTINUING PROFESSIONAL EDUCATION SERVICES	\$4,000.00	\$4,000.00	\$4,000.00	\$12,000.00
212 - PA Accountability Grants	\$28,500.00	\$0.00	\$0.00	\$28,500.00
TOTAL	\$32,500.00	\$4,000.00	\$4,000.00	\$40,500.00

Goal: UTILIZE DATA TO DRIVE INSTRUCTION

The District will utilize benchmark testing, PSSA results, and other locally administered assessments in order to make informed decisions about instruction. By knowing each student's strengths and weaknesses, teachers will be able to use data to differentiate instruction for all students.

A. Investigate and	Year 1	Year 2	Year 3	Total	Funding Source
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acquire a student data warehouse system					
A. Warehouse Program Selection	\$25,000.00	\$0.00	\$0.00	\$25,000.00	212 - PA Accountability Grants

B. Implement benchmark testing in the areas of reading and math for grades 3-11	Year 1	Year 2	Year 3	Total	Funding Source
Purchase 4 Sight online testing	\$3,500.00	\$0.00	\$0.00	\$3,500.00	212 - PA Accountability Grants
Train principals, teachers and students	\$4,000.00	\$4,000.00	\$4,000.00	\$12,000.00	050 - CONTINUING PROFESSIONAL EDUCATION SERVICES

TOTAL	\$32,500.00	\$4,000.00	\$4,000.00	\$40,500.00	
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GRAND TOTAL	\$32,500.00	\$4,000.00	\$4,000.00	\$40,500.00	
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Monitoring

The District Technology Committee has been in effect for twelve years. It is comprised of board members, administrators, teachers, and community members. The Technology Committee meets at least three times per year,

The technology committee has focused its efforts on developing ways to increase the use of technology in the classroom. The committee has seen the district create an infrastructure to allow all classroom teachers direct access to the Internet. They have seen the purchase of a wireless lab in the middle school. They have also worked to help the middle school and high school to move to electronic sending of grades to the office through the use of a grading program compatible with the MMS program used as a data base at each school.

This committee will continue to monitor and enhance our technology offerings and infrastructure and make recommendations to the administration and school board. Presently, some new initiatives include Internet2, the purchase and training on a student warehousing program called Performance Tracker, the implementation of online benchmark testing in grades 3 -11 known as 4Sight, and updates to our infrastructure.

In addition, the committee also assesses the professional needs of our staff in the areas of technology and makes recommendations to the professional education committee on course offerings which includes summer workshops and special sessions occurring during the school year.

While the committee serves one function of monitoring, our building administrators are also charged with this function as well. Once the district has established and articulated technology goals each year, we continue to monitor implementation via informal walks throughs at the building levels and through formal classroom observations. Since we will be implementing online benchmark testing in most grades, we will also be receiving input from the teachers on the ease of use of the system, and the pros and cons of our implementation efforts.

As technology changes so rapidly from even one month to the next, the District will maintain its efforts on studying best practices and looking ways to deliver services in the most economical and educationally sound manner.

Evaluation

The District will continue to evaluate its efforts in the areas of technology. The Technology Committee will explore of number of actions throughout the life of the plan to gauge effectiveness and future needs. These actions may include but not be limited to; staff surveyys, students surveys, public surveys, needs assessments, attainment of goals, etc.

Since the technology plan is now part of the Strategic Plan, annual evaluations are built into the process. In addition, each administrator is required to write goals that include mahor areas of conern based upon their previous year's evaluation and upon the strategic plan. The superintendent will identify the performance measures for each of the administrators' goals. The district uses a form that includes a rating system. This rating system will be used with the technology goals selected by the administrator.

At the end of each school year, the administrators will collect data to identify where their building staff is in completing the objectives. The information will be forwarded to the superintendent and be used as part of the administrator's evaluation.

The thrid part of the evaluation system is for the superintendent to discuss with the school board his finding as to our progress with the technology plan.