# Wendell Military Academy

Technology Plan

2004 - 2007

June 1, 2004

## Technology Plan for Wendell Military Academy 2004-2007

#### Introduction

Wendell Military Academy is located near Dripping Springs in the Hill Country of Texas. It is a boarding school with a technologically rich environment designed to provide students with the tools necessary to enable them to be prepared to enter any branch of the United States military as well as become life-long learners. Students come from all over the United States. The school is partially funded by a trust created by General Frank Mills and has 501 (3) c non-profit status. Scholarships are available for deserving individuals. Students range in age from 13 to 18; they must maintain a grade point average of 3.0 or higher and pass a battery of both physical and mental tests. They receive instruction in the state required elements of math, science, social studies, and English language arts with additional electives offered in aeronautics, government, military history, mechanical engineering, and computer technology. Technology is a critical element in today's military. The purpose of Wendell Military Academy is to prepare students to adapt to changes and give them a strong background in maintaining and developing skill in the use of emerging technologies. This Technology Plan is aimed at providing up-to-date tools to help the students achieve technological adeptness.

#### Mission/Vision Statement

Wendell Military Academy's mission is to facilitate individuals becoming leaders in military and civilian life through discipline and training with an emphasis on technology.

Wendell Military Academy has an unparalleled commitment to excellence in providing academic instruction that will enable its students to reach their greatest potential physically, socially, culturally, and intellectually. The school is committed to enabling students to become honest, service-minded individuals who exhibit a life long love for learning.

#### History of Technology Utilization

Wendell Military Academy is a new school whose development began in August of 2003. About 95 students are expected in 2004/2005, which will be the first year of operation. The first year will provide for ninth through eleventh grade. Beginning the following year, a senior class will be added. Average class size is 12 students. There are 10 classrooms and 15 instructors on staff. Five of the regular classrooms are located in the new Technology Center. The administration consists of the Headmaster, the Dean of Students, a secretary, a bookkeeper, and a janitorial staff of two individuals. Both the janitorial staff and the office will also have student workers.

## Current Status of Technology Utilization

The purpose of this Technology Plan is to ensure that technology is an integral part of the education provided at the Academy. A committee made up of people involved in the creation of the Academy developed the plan. The committee included the Headmaster, the Technology Coordinator, several members of the board, three faculty members, and five parents of first-year students. The Board of Trustees funded this technology program to address the needs of the school for the first three years. Recommendations contained in the plan are based on technology available today. Adjustments to the plan will be made if emerging technology becomes available during the three-year period that will enhance the Academy's technology. The school board has provided the facilities and wiring necessary to implement this plan; the facilities were planned utilizing the information contained in the Technology Plan. The library, student computer lab, and computer room, which house the servers and peripheral equipment, are located in the Technology Center. The plan provides technology for the entire campus.

#### Goals

The goals of the Technology Plan are:

- Goal 1: Provide access to information and technology on a school-wide basis.
- Goal 2: Ensure that technology purchases will provide compatibility both now and in the future.
- Goal 3: Create security procedures to protect the physical equipment, the data, and software.
- Goal 4: Provide staff development to enable proper use of technology, especially for instructional areas.
- Goal 5: Create opportunities for student involvement, student interaction with the surrounding communities, and parental knowledge with the technology being used on campus.

#### **Software Resources**

Microsoft and Linux operating systems will be present on campus. The servers and "test" computers will operate Linux. The computers in the rest of the school will be Microsoft Windows. Open source software in very simple terms is software that is freely distributed to anyone, anywhere, anytime. It is available for many different types of applications. Open Office and Linux are examples of open source software; Open Office is a product that mirrors Microsoft Office. Several open source products will be used at Wendell Military Academy.

There are many organizations that provide technology to schools and non-profit organizations if they meet the requirements posted on their websites. The following are some of the resources Wendell Military Academy could use to acquire technology:

- techsoup.org© -This company provides information for non-profit organizations concerning technology and software available locally and on the Web (techsoup.org, 2004).
- 2) Adobe (Adobe, 2004)
- 3) Symnatec (Symantec's donations are through techsoup.org.)
- 4) Microsoft (Microsoft, 2004))
- 5) McAfee (McAfee, 2004)
- 6) Macromedia (Macromedia, 2004)
- 7) IBM (IBM, 2004)
- 8) U.S. General Services Administration (USGSA,2004)
- 9) Education and Library Networks Coalition (EdLinc) This organization provides "discounts for telecommunication services" (EdLinc, [2004]).
- 10) Funding Factory This organization provides technology or cash for collected ink cartridges and used cell phones (Funding Factory, 2004).

## Implementation Plan

## Year 1

Technology implementation has been designed to enable the highest success in student achievement and create graduates ready to be leaders in the military or highly skilled employees in the work force. The Technology Coordinator will make all future purchases of computers and equipment as recommended in this plan. The technology center was completed and equipment installed before classes will begin in September 2004. It includes a 2000 square foot library, a computer lab, a computer equipment room, and 5 classrooms.

#### Year 2

During the second year, the technology will be maintained. Ten percent of the computers will be upgraded to meet the changes in technology and keep the equipment as close to "cutting edge" as is financially and practically possible. Special care will be taken in choosing the changes to be made and how they will affect the overall technological exposure of the students and staff. Available budget should be approximately \$48,000. \$21,000 will be allotted to recurring costs (see Appendix). \$14,000 will be used to upgrade computers and purchase new machines. \$5000 will be kept in reserve for maintenance and other contingencies. \$8,000 will be available for new technology. Following the first school year determinations will be made concerning what technology is needed to improve the school's ability to provide excellent educational opportunities to its students. The monies set aside for new technology will be allocated to meet these needs.

#### Year 3

Money will be spent during the third year to maintain the current technology. Again, ten percent of the computers will be upgraded or replaced with more advanced computers. During this year, the technology will be examined to determine what items need to be replaced or upgraded to maintain the excellence of the technological level at the school. The technology budget should be approximately \$52,000 dollars. Expenditures this year will focus on maintaining and upgrading current equipment and peripherals to create a good foundation for the technology plan that will be created before the conclusion of the 2006/2007school year.

#### Hardware

All computers purchased for the campus at start up are P4 2.6 GHz computers with 256 MB of RAM. The computers have 20 GHz hard drives, 40X CD-ROMS, two USB ports, and

three and a half inch floppies. A CD-R/W (CD-ROM with read and write capabilities) was purchased for the computer in the Technology Coordinator' office. Each classroom has one computer for the instructor that has been donated by First Victoria National Bank. These computers are Pentium 700s with 128 MB RAM; they have 10 GHz hard drives, CD-ROMS, a USB port, and three and a half inch floppy drives. Instructors have access to four overhead projectors or one LCD projector. Each class has a phone with intercom capabilities. The phones were included in the start up fund for the campus. Classrooms are assigned printers if there is a documented need. The lab has fifteen computers, a laser printer, and an inkjet color printer. The office contains four computers, a laser printer, a color laser printer, a copier/fax machine, and four phones. The phones were provided for in the building plan. The library has three computers for the library automation system and three computers for accessing the Internet. The library also has a laser jet printer, a large screen television that a parent has donated, and DVD player. There are also three nineteen-inch televisions and three DVD players that have been donated by parents. The computer room contains two servers, one for students and one for faculty and staff. There will also be a workstation class machine for the students to work on to create and "play" with as a server. A digital camera will be purchased to provide pictures for the school website (see Appendix).

#### Software

Microsoft XP is included on all the purchased computers. Microsoft Office is being purchased for new computers. Ten of the donated computers go in each classroom Microsoft 2000 Pro is being purchased for these computers (CDW, 2004). Linux and Open Office will be put on the other five donated computers (Linux Online, 2004; OpenOffice.org, 2004). Ground school software that will give the students the opportunity to receive their private pilot's license,

after they complete the flight requirements at a local airport, will be put on 10 computers in the lab. The software is called Cessna Student Private by King Schools, a well-known provider of aviation software (King Schools, 2004). Open software will be used for the first year for the computer classes. Linux with Samba will be on the servers (Samba, 2004). Norton Anti-Virus will be put on each computer (see Appendix). The school website will be created by the Technology Coordinator at a cost of \$2500. Wendell Military Academy's website will be maintained as a project by the advanced computer class.

#### **Facilities**

A technology center has been built that houses a 2000 square foot library, a 750 square foot computer lab including a glassed in office for the Technology Coordinator, a 400 square foot computer room that will house servers and peripheral equipment and an experimental lab, and five classrooms (These classrooms are regular classrooms and not part of the Technology Plan.). The building costs including wiring for technology were provided for in the building plan. Furniture for each building was purchased through the building plan. The individuals involved with classes, the offices and Technology Center helped to determine what was needed for each area. The lab will accommodate 15 users. The new building will be ready for use before the beginning of the 2004/2005 school year.

## Staffing

The Technology Coordinator will be in charge of the technology on campus. She is also the computer instructor and will provide professional development in computing for the staff. She will coordinate the phone system on campus, the computer lab, and access to and management of all technology on school grounds. She will have student computer assistants to help take care of problems and routine management. The computer assistants will be upper

classmen who have passed proficiency requirements and have need for additional finances. They will be paid minimum wage, which currently is \$5.15, and be allowed to work a maximum of 15 hours per week (U.S. Department of Labor, 2004). Students may work no more than 3 hours per day during the school week, and no more than 8 hours on Saturday. They must maintain a 3.5 grade point average. Only upperclassman may work as computer assistants in the labs and in the computer room. To be a computer assistant students must have faculty and technology department approval. They must have had prerequisite courses, pass a proficiency test, or complete a course to ensure they have a working knowledge of the tasks involved in working on and troubleshooting computers. The computer lab will be open and manned by students from 3:30 PM-10:00 PM on school days, on Saturday from 9:00 AM-11:00 PM, and Sunday from 1:00-10:00 PM. During the day the computer classes will be held in the lab; and it will be available to other classes on a scheduled basis.

The Technology Coordinator's salary is included in the main school budget. The computer technicians are paid from the technology fund. The day-to-day administration of the technology department will be handled on campus; web hosting and labor for the servers and firewall will be outsourced (FatCow.com, 2004).

#### Available Funds

The technology department has a complete budget of approximately \$88,000 for the 2004/2005 school year; these monies were used to purchase computers, software and peripherals to use in the new facility. Each student pays a technology fee of \$400 (with 95 students this will equal \$38,000 the first year); these monies go directly to the technology fund. Approximately \$9000 will be held in reserve for contingencies. This technology budget did not include the monies for the technology center facility or the wiring of the campus; that cost was included in

the initial building plan for the academy. The Technology Coordinator was involved in the creation of the technology center and the renovations of the classrooms that were not in the new technology center. The classrooms, library, computer lab, and computer room were wired for networking, phone, and security. To ensure security and alleviate viruses on the servers, floppy disks will be purchased each year for the students and faculty to use (CDW, 2004). Students will purchase the disks for \$1.00 each. This money will be placed in the Technology Fund. For each of the next three years the money collected from the technology fee and \$10,000 from the general fund will be allocated for use by the technology department.

### **Potential Funding Sources**

There are many sources from which Wendell Military can acquire software, hardware, technology and more. Faculty is encouraged to present grant proposals for projects they would like to pursue. The proposals will be reviewed by a grant committee made up of the Headmaster, president of the board, and other faculty who will be asked to participate based on their areas of expertise. Parents, and eventually alumni will be asked to provide gifts for specific needs.

Parents have already donated a giant screen television, four DVD players and three nineteen-inch televisions. First Victoria National Bank (FVNB) has provided 15 computers that are allocated one to each of the 10 classrooms and five for the experimental lab. FVNB offers to computers to schools on an annual basis. Bank of America also donates computers to schools.

#### **In-kind Contributions**

Parents working for companies that will match their contributions are encouraged to contribute when possible. Other organizations that will match contributions will be actively pursued.

## Plan Administration/Management

The Technology Coordinator will have overall authority over the Technology Plan implementation and will report directly to the Headmaster of the Academy. Purchases will be made consistent with recognized good practice and following the Academy's standard purchasing procedures. The Accounting staff will use approved customary and usual accounting practices to track budget data and actual expenditures.

## Staff Development/Training

Technology staff is required to have computer administration and networking skills. In the budget for the technology department there is \$2000 available for training of staff. There is also \$500 available to pay a stipend to the Technology Coordinator for up to four professional development sessions for the faculty. Student staff will be given necessary training prior to running a lab, and have an opportunity to take short classes taught periodically through the year by the Technology Coordinator to increase their knowledge base (see Appendix).

## Support Structure

The Technology Coordinator and computer assistants will provide technology support.

One computer assistant will establish and manage a help-desk, which will be available during normal school hours. Outsourcing will be used for hardware problems that the Technology Coordinator is unable to solve.

#### Americans with Disabilities Act (ADA) Compliance

Wendell Military Academy follows the ADA guidelines to ensure compliance with the Americans with Disabilities Act. The library and computer labs are in compliance to allow easy access for faculty and students. One desk in the lab is wheel chair accessible. All internal and external doors are 36 inches wide. Pathways around desks are a minimum of 36 inches.

## Performance Measures

For the future, a technology questionnaire will be designed which will determine whether the technology on campus is meeting expectations and/or fulfilling its desired purpose. The Technology Coordinator will have the first class of students participate in the creation of this document to give them ownership in the process and to guarantee their participation. The questionnaire will be given to students and faculty at the end of each school year, which is from August to May. Data collected from it will be reviewed over the summer session to determine if the plan is fulfilling the needs of students and staff or if there are areas that need to be addressed. There will also be a discussion board available on the school website for technology problems and suggestions.

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# Appendix Budget for Tech Plan 2004-2007

Technology	#	Cost/ea	Total	Recurring costs		
computers	25	\$850.00	\$21,250.00	Item	Cost/month	Per year
				Internet	\$50	\$600
Software/hardware/Misc.				Norton A/V	\$10.00	\$4,800
MS Office XP	35	\$230.00	\$8,050.00	FatCow Web Hosting		\$99
					hours/week	52 weeks@\$5.20
MS 2000 Pro	10	\$290.00	\$2,900.00	Student Workers Cost	54.50	\$14,736.80
HP 4200N Laser Printer	2	\$1,500.00	\$3,000.00	Total Recurring costs		\$20,236
HP Color LaserJet 4650dtn	1	\$3,300.00	\$3,300.00			
HP DeskJet 6122 printer	4	\$200.00	\$800.00			
Xerox Fax Centre f 12	1	\$1,299.00	\$1,299.00			
Multifunction copier						
3 1/2 Floppy Disks	5	\$25.00	\$125.00			
Canon Power Shot S410						
	1	\$375.00	\$375.00			
Server	2	\$2,500.00	\$5,000.00			
Set up servers and firewall	30	\$85.00	\$2,550.00			
Cisco 48-port switch	1	\$1,700.00	\$1,700.00			
Firewall/router	1	\$200.00	\$200.00			
Training	1	\$2,000.00	\$2,000.00			
Professional Development stipend	4	\$125.00	\$500.00			
King Ground School Software	10	\$310.00	\$3,100.00			
Set up website	1		\$2,500.00			
Total fixed costs			\$58,649.00			
Total first-year costs			\$78,884.80			