

Dutchess County Boces Technology Plan

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Our technology Plan can be found online:

<http://www.dcboces.org/publications>

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Technology Planning Committee:

CTI:

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Bruce Safford Teacher
Mitchell Shron Supervisor and Principal of CTI
Karen Dietz..... Teacher
Eileen Sikora.....Academic Liaison
Monique Syczyk Teacher
Roberto BonfontCoordinator of Work Based Learning Programs
Stephen Lawson..... Teacher
Susan Moraca..... Nursing Coordinator

Alternative & Special Education:

Ann Banas.....Teacher, BOCES Class at Vail Farm Elementary School
Barbara Borchers.....Teacher, Alternative High School @ BETA
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Daren Lolkema.....Coordinator of Learning Technology
Mr. Kenneth Louis Jeune.....Coordinator of Special Education
Ms. Maureen Moloney.....Teacher, BOCES Class at Union Vale Middle School
Ms. Randi Morf.....Teacher, Salt Point Center
Ms. Susannah Renzi.....Staff Specialist, Educational Resources @ BETA
Ms. Tracey Smith.....Teacher, Salt Point Center
Ms. Denise Traver.....Lead Administrator, Salt Point Center
Mr. Angelo Urrico.....Staff Specialist, Educational Resources @ BETA
Ms. Kathy White.....Teacher, Alternative High School @ BETA

Introductory Material:

The Dutchess County BOCES Mission:

Dutchess BOCES provides leadership in raising all Dutchess County students' academic performance to a level that meets or exceeds the New York State Standards. This will be done through focusing available resources in new ways that enhance leadership in our schools, promote strategic data driven decision-making, and provide services and programs needed by county schools to fulfill this mission. We continue in our mission of collaborating with other community agencies for the betterment of county residents to meet the educational needs of all citizens.

Introduction:

The Board of Cooperative Educational Services (BOCES) first came into statewide existence in 1948 by an act of the New York State Legislature. Over the years the number of BOCES statewide rose to 82 in 1958 and then through consolidations dropped to the present level of 37. Some rural BOCES serve a student base of 8,000 pupils while others exceed 190,000.

Dutchess County BOCES was organized on May 22, 1957, upon the order of the Commissioner of Education. Through the cooperative efforts of our thirteen component school districts, Dutchess County BOCES is able to offer a wide variety of educational programs and support services to children and adults in Dutchess County. We serve a student base of 48,000 pupils.

Dutchess County BOCES is recognized for its premier educational and support services providing quality and cost-effective solutions for our community. We promote an organizational culture fostering collaboration, innovation, efficiency, excellence and leadership that is embraced by BOCES and its community.

Dutchess County BOCES consists of 2 campuses. There are 3 schools; an alternative High School, Special Education, and a Career and Technical Institute. Altogether there are 5 buildings which make up the BOCES. For detailed information on student enrollment & demographics, numbers of teacher as well as socioeconomic status for our Career and Technical Institute, Special Education, and Alternative High School please see below:

Demographics:

Career and Technical Institute Demographics:

The Dutchess BOCES Career & Technical Institute is a regional career development center serving high school and adult students from the fourteen school districts in the Mid-Hudson Valley of New York State. There is an approximate total high school population of 707 students. High school students come to our institute from diverse educational and socio-economic backgrounds. Inner city students from Beacon and Poughkeepsie find themselves in classes with students from rural districts, such as Pine Plains, Red Hook and Webutuck.

Honor students from across the county are provided with opportunities to explore professional careers in law, education, marketing and health occupations through our New Visions Program, while our Adaptive Transition Program prepares Special Education students for their first workforce experience. The Adult Program serves a wide range of Consumers including individuals seeking new skills, the dislocated blue and white collar workers and the individuals with disabilities seeking reentry into the workforce.

The Dutchess BOCES Adult and Workforce Development Program is a New York State Education Department designated ACCESS Center (Adult Centers for Comprehensive Education and Support Services). Comprehensive services include literacy and vocational instruction, childcare, case management, transportation and job placement assistance. These services are provided to approximately 6,000 adults and out-of-school youth at the BOCES Technical Center and 20 off-campus satellite locations throughout the county. Collaborations with the LDSS, VESID, DOL, county school districts, county human service agencies and community-based organizations creates a network that is cost effective and minimizes duplication of services.

The Adult Occupational and Continuing Education Program is a major asset to the community. It serves the community by offering vocational and a-vocational courses, courses to provide job specific skill upgrading and job preparation courses. In order to serve community and individual needs the program maintains a high level of cooperation with community agencies and local businesses. Placement is an important goal tied in to the job preparation programs. Adult men and women are encouraged to participate in programs leading to job skills in both traditional and non-traditional areas of employee.

Alternative & Special Education Demographics:

The Dutchess County Board of Cooperative Educational Services (BOCES) Alternative and Special Education Division provides various educational programs to 519 students from the thirteen component local education agencies.

The Special Education programs are divided into three areas which are located at the Salt Point Center School, the BETA Alternative High School, and various classes housed in component district classrooms throughout the county.

DISTRICT CLASSES

- In the Spackenkill Union Free School District, there are two BOCES classes located at Nassau Elementary and one BOCES class is located at Spackenkill High School.
- There is one BOCES class located at a shopping plaza in Red Oaks Mill.
- In the Arlington Central School District, there are three BOCES classes located at Union Vale Middle School, three BOCES classes at Vail Farm Elementary, and four BOCES classes at the Arlington High School.
- In the Pine Plains School District, there is one BOCES class in the Pine Plains Jr. /Sr. High School.
- In the Pawling School District, there is one class in the Pawling High School.
- In the Red Hook School District, there is one class located in the Linden Avenue Middle School and one classroom located in the Red Hook High School.
- There is one classroom located in St. Francis Hospital.

The demographic information for the students in BOCES classes in district classrooms includes the following:

C Student / Staff Ratio

- 1-12-1 (1 Teacher, 12 Students, 1 Paraprofessional) = 1 class
- 1-8-1 (1 Teacher, 8 Students, 1 Paraprofessional) = 7 classes
- 1-6-1 (1 Teacher, 6 Students, 1 Paraprofessional) = 1 class
- 1-6-2 (1 Teacher, 6 Students, 2 Paraprofessionals) = 8 classes
- 1-12-4 (1 Teacher, 12 Students, 4 Paraprofessional) = 1 class

C Classification of Disability

- | | |
|---------------------------|------|
| - Learning Disabled | 2% |
| - Emotionally Disturbed | 3% |
| - Traumatic Brain Injured | 2% |
| - Multiply Disabled | 54% |
| - Mentally Retarded | 8% |
| - Autistic | 20% |
| - Speech Impaired | 7% |
| - Other Health Impaired | 7% |
| - Visually Impaired | 0.5% |

C Gender

- 69% Male
- 31% Female

C Age

- Birth dates run from 1988 to 2003 across all classes

C Ability Levels

- Across programs in the elementary and middle school buildings, ability levels range from K - 8
- Across programs in the high school buildings, ability levels range from K - 12

SALT POINT CENTER (Special Education)

The demographic information for the students in BOCES Salt Point Education Center classes includes the following:

C Student / Staff Ratio

- 1-8-1 (1 Teacher, 8 Students, 1 Paraprofessional) = 9 classes
- 1-6-1 (1 Teacher, 6 Students, 1 Paraprofessional) = 5 classes
- 1-6-2 (1 Teacher, 6 Students, 2 Paraprofessionals) = 9 classes

C Classification of Disability

- | | |
|-------------------------|------|
| - Learning Disabled | 3% |
| - Emotionally Disturbed | 57% |
| - Multiply Disabled | 17% |
| - Mentally Retarded | 1% |
| - Autistic | 21% |
| - Other Health Impaired | 13% |
| - Speech Impaired | 4% |
| - Visual Impaired | 0.5% |
| - Non-classified | 5 % |

C Gender

- 82% Male
- 17% Female

C Age

- Birth dates run from 1994 to 2004 across all classes

C Ability Levels

- Across all programs, ability levels range from pre-K - 8

C Lunch Program

- Free: 33%
- Reduced: 7%

C Lunch Program

- Free: 35%
- Reduced: 25%

DATA COLLECTION PROCESS

To help define the student population which is served in the various programs and to delineate the types of technologies that best serve these students, it was necessary to gather student demographics including district of origin, disability classification, age, ethnicity, socioeconomic status as reported through the free and reduced lunch program, gender and ability levels.

One critical aspect of data collection for this Technology Plan includes producing an inventory of all existing hardware, telecommunications, and software that is currently in use across all programs. With the assistance of the Instructional Services Technology Staff, we assess the configuration of program sites for emerging technology. This inventory includes any existing Assistive Technology input and output devices. Sites include Dutchess BOCES BETA site, Salt Point Education Center, and BOCES District classes. Additionally, we are looking at BOCES district class infrastructure for equal access. Continual review of emerging technology will take place.

Recognizing that technology carries embedded student and staff responsibilities, user agreements are in place.

This plan is a continuation of the previous plan implemented by this agency and allows for continued data collection as the plan is implemented. The District-wide Professional Development Plan regularly surveys the staff and the integration of technology into all curriculum areas. Our administrative support staff receives training on a regular basis to provide new information, streamline our operational system, and to better support our instructional staff and students.

Vision and Goals:

Vision:

Dutchess County BOCES will lead the region in the use of innovative technology programs designed to teach for understanding by engaging students in classroom activities with integrated Learning Technology components. Learning technology will be widely and equitably available to all students, and teachers.

Goals:

The 4 goals of this plan are:

Goal 1: Teaching for Learning: Dutchess BOCES students will have meaningful technology enabled learning opportunities, including assistive technologies and virtual learning opportunities that develop proficiencies as defined by the Partnership for 21st Century Skills

(21stcenturyskills.org), required to become lifelong learners. Technology which also facilitates the exploration of future careers and work related opportunities. Learning technology will be widely and equitably available to all students, and teachers.

Strategies for Goal 1:

- Expand the utilization of Compass Learning Odyssey educational software in K-12 classrooms and PLATO (computer-aided instructional/remediation), to enhance technology education and literacy
- Write and distribute specific procedures to all staff regarding protocol on how to access available technology and software in classrooms
- Develop and distribute a resource compendium of available educational software and educational websites for classroom use
- Collaborate and maintain a Technology Committee, with staff representation from each program, to address ongoing planning issues and to monitor progress

Goal 2: Inventory: Replace all currently outdated technology and maintain an “industry standard” replacement/upgrade of all classroom computers (3-5 years)

Strategies for Goal 2:

- Continue to maintain an annually-updated inventory list of all current hardware
- Replace all classroom workstations that are 8 years old
- Within the following year, replace all classroom workstations that are older than 5 years
- Develop and maintain an annual upgrade/replacement rate of 20% of all existing classroom workstations within the Divisions
- Create and maintain a Technology Committee, with staff representation from each program, to monitor progress in this process

Goal 3: Professional Development: Dutchess BOCES educators will have competencies in 21st Century Skills, especially information and media fluency, to enable the transformation of teaching and learning to improve student achievement.

Strategies for Goal 3:

- Continue to assess professional development needs through online and paper survey instruments
- Maintain a Technology Committee, with staff representation from each program, to advise administrative staff and the Superintendent’s Conference Planning Committee in this area.
- Explore and implement strategies to improve collegial sharing of technological knowledge and skills
- Identify staff leaders and staff members willing to provide consultation and training in technology use
- Access technology use within the context of instruction to create the most optimal instructional environment

Goal 4: Collaboration: Explore ways of collaborating with the community to enhance the effective use of technology in CTI programs and classes.

Strategies for Goal 4:

- To implement and support Professional Consulting Committees
- To implement and support Internship programs
- To provide access to technology to GED and Adult students
- To provide new avenues of communication with parents and community, through use of the DC BOCES web site
- To provide access to a computerized data job bank, via the work-based learning coordinator

Curriculum and Instruction:

Our goals are closely aligned to the ISTE National Educational Technology Standards (NETS•S) and Performance Indicators for Students.

http://www.iste.org/Content/NavigationMenu/NETS/ForStudents/2007Standards/NETS_for_Students_2007_Standards.pdf

Details for this standard can be found by either clicking on the link above, or by visiting the www.iste.org website.

Career and Technical Institute:

A. Curriculum Integration:

The Carl D. Perkins Vocational and Technical Education Act of 1998 was in response to a national concern that high school students lacked the basic skills to succeed in the new global workforce. This legislation called for focus on the following areas:

Basic and Advanced academic skills-integrated English into the Vocational programs, New Vision(s) programs, MST, college level Business Math, Economics, and Government. Integrated curriculum of academic and occupational skills that will prepare all students for employment as well as postsecondary education
Computer and Technical skills- PLATO, Mitchell on Demand, Career Zone, research on web sites for different programs

Theoretical knowledge and communication-desktop publishing, word processing, database management, spread sheet applications, and computerized accounting programs

Problem-solving, teamwork, and employability skills- VICA/Skills USA, Interact, Career Zone, CEIP, Cooperative Educational Work Experience, Cooperative Diversified programs

The ability to acquire additional knowledge and skills through a lifetime-investment in postsecondary education through college articulations, combining work with formal education through internships, Capstone, and paid experiences, and engaging employers and employees in new partnerships through consulting committees, internships, shadowing and other work related experiences.

It is critical for career and technical educators to be knowledgeable about current trends in the economy, society, and the workforce. The CTE curriculum must reflect these trends if youth and adults are to be prepared for the current and future situations they will encounter. (“The Curriculum Handbook: Career and Technical Education”. Stewart and Smith. ASCD. Alexandria, Va.)

NYS CDOS Framework

Career Development

Students will be knowledgeable about the world of work, explore career options, and relate personal skills, aptitudes and abilities to future career decisions.

Integrated Learning

Students will demonstrate how academic knowledge and skills are applied in the workplace and other settings.

Universal Foundation Skills

Students will demonstrate mastery of the foundation skills and competencies essential for success in the workplace.

Career Majors

Students who choose a career major will acquire the career-specific technical knowledge/skills necessary to progress toward gainful employment, career advancement and success in postsecondary programs. In order to prepare students for the above standards our staff must be equally prepared and knowledgeable of the emerging technologies and essential skills and dispositions needed for success in the global economy of the future.

- B. Strategies describe how technology will be used to improve the academic achievement, including technology literacy, of all students.

The English Integration Plan provides a floor plan for our technology literacy (English) teachers, giving them the tools to improve academic achievement for all our students enrolled in our trade education courses.

Students develop online career plans through the use of the New York State Career Zone web site. <http://www.nycareerzone.org/>

They develop their cover letters, resumes, and other career development tools needed to be successful in the 21st century.

Students have access to online work-based learning resources developed by the Coordinator of Work-Based Learning programs for career development.

<http://www.dcboces.org/CTI/workbasedlearning>

A full service web site provides the students with access to online web resources that are locally as well as nationally developed for career development.

<http://galileo.dcboces.org/icampus/course/enrol.php?id=922>

An online electronic job bank provides students with job placement opportunities in the local area market that aligns with their trade education goals, providing “entry level” opportunities for career progression.

<http://www.dcboces.org/CTI/workbasedlearning/jobs>

RESTRUCTURING PROGRAMS AND STUDENT OUTCOMES

Upon being admitted to the center all students are assessed for their knowledge, skills, interests and abilities using computer-based academic, aptitude and interest assessments. Students are then invited to research and explore career options using internet and CD ROM based resources and in-person and electronic visits to job sites. This information will be used for career plan reflection and formulation. It will also serve as the foundation for portfolio development. All students who complete a program of instruction at our center will demonstrate their achievement of the Career Development and Occupational Studies Framework Standards through an electronic portfolio with items designed specifically to address each of the framework standards.

Standard #1:

Students will be knowledgeable about the world of work, explore career options and relate personal skills, aptitudes and abilities to future career decisions.

Sample Electronic Portfolio Items via Career Zone

Electronic personal balance sheet showing an inventory of skills, qualities and experiences needed for successful employment in a career option.

Research paper containing details of at least three specific jobs within a career option and include: education or training level qualification necessary for entry level and career sustained employment, number of job openings in the career options, at least three post-secondary programs offering advanced study/training in the career option and entrepreneurial possibilities.

-Resume and letter of application.

-Video tape demonstrating effective interviewing techniques.

- Personal career plan containing specific steps/activities toward attainment of a career goal.

Standard #2:

Students will demonstrate how academic knowledge and skills are applied in the workplace and other settings.

Sample Portfolio Items via Career Zone

Research a series of job description and training plans to identify the necessary application of academic knowledge and technical skills that are required for a particular career. Develop an electronic presentation for your class to report on the results. Include in the report information from local or global operation employers regarding job outlook, potential earnings capacity in a competitive international marketplace and the academic knowledge and technical skills required.

Working in a team and using various forms of technology and communication techniques (e.g., CD-ROM, video, slides or presentation software) develop a presentation that traces the history of a specific career and demonstrates how job requirements and training are changing due to new technology. Include in the report descriptions and illustration of how social, economic and governmental changes may require exploring a variety of careers and develop broad-based transferable skills that are needed for gainful employment.

Produce an annual career plan report that includes at least eight samples of their work and describe why they selected the particular samples of work and indicate possible career choices of interest.

Standard #3A:

Students will demonstrate mastery of the foundation skills and competencies essential for success in the workplace.

Sample Portfolio Items via Career Zone

Select a new and emerging technology in their trade area; produce a video or multimedia presentation regarding the application, desired results, maintenance and trouble shooting of this piece of technology.

Students will demonstrate their ability to request information via e-mail and present information using presentation graphics software.

Demonstrate an understanding of resource management by designing, equipping and budgeting the cost and man hours necessary for construction of a workspace for your trade area.

Students will demonstrate an understanding of systems by drawing and interpreting an organizational chart of a typical employer in their trade area or a mechanical system that they must troubleshoot.

Standard #3B:

Students who choose a career major will acquire the career-specific technical knowledge/ skills necessary to progress toward gainful employment, career advancement, and success in a postsecondary program.

Alternative and Special Education Curriculum Integration:

Dutchess BOCES Alternative and Special Education division is committed to the optimization of student learning and teaching and encourages the use of technology and networked resources, including the Internet. At BOCES, we encourage the integration of technology as an integral part of the curriculum. Through software applications, on-line resources, video conferencing, bulletin boards and electronic mail, the network will enhance the educational experience and provide for county-wide, state-wide, national, and global communication opportunities for staff and students. The BOCES Board adopted Policy #7161 to implement an acceptable use policy.

We encourage instructional staff to foster the use of technology to support student-centered approaches to instruction so that students can conduct their own scientific inquiries, their own writings, informational gathering, analysis, synthesis, and reporting through a variety of resources such as World Wide Web applications. These learning opportunities for students will provide for a collaborative school environment wherein our teachers serve as facilitators and coaches.

Through participation in the CAIT Council, including public and nonpublic districts, county-wide standards have been developed for grades K-12 integrating the New York State Learning Standards. There is continuing evaluation between all participating districts in the consortium. The consortium continually assesses and evaluates the telecommunications services, WAN, and LANs of the districts.

The Division participates in the Dutchess BOCES Schools Library Services. The students access local libraries in their home communities for research. District-based classes work cooperatively with the local library systems. Staff can access the Mid-Hudson Teacher's Centers library materials. As a part of classroom curriculum, teachers take students on field trips to the community library systems.

In order to achieve our goals at Dutchess BOCES, we support community, business, and parent involvement in technology planning. The support for such a plan is accomplished by input from the CR 100.11 Committee and the CAIT Council.

Specific Student Outcomes:

Integration of technology in the classroom on a daily basis is used to provide and support a challenging curriculum through instructional practices. Within a sound educational setting, technology will enable students to:

- Communicate using a variety of media and formats
- Access and exchange information in a variety of ways
- Compile, organize, analyze, and synthesize information
- Draw conclusions and make generalizations based on information gathered
- Use information and select appropriate tools to solve problems
- Know content and be able to locate information as needed
- Become self-directed learners
- Collaborate and cooperate in team efforts
- Interact with others in ethical and appropriate ways

In accordance with the New York State Learning Standards:

Dutchess BOCES technology standards for students are divided into six broad categories. Standards within each category are to be introduced, reinforced, and mastered by students. These categories provide a framework for linking performance indicators found within the **Profiles for Technology Literate Students** to the standards. Teachers can use these standards and profiles as guidelines for planning technology-based activities in which students achieve success in learning, communication, and life skills.

1. Creativity and Innovation

Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology. Students:

- a. apply existing knowledge to generate new ideas, products, or processes.
- b. create original works as a means of personal or group expression.
- c. use models and simulations to explore complex systems and issues.
- d. identify trends and forecast possibilities.

2. Communication and Collaboration

Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others. Students:

- a. interact, collaborate, and publish with peers, experts, or others employing a variety of digital environments and media.
- b. communicate information and ideas effectively to multiple audiences using a

variety of media and formats.

- c. develop cultural understanding and global awareness by engaging with learners of other cultures.
- d. contribute to project teams to produce original works or solve problems.

3. Research and Information Fluency

Students apply digital tools to gather, evaluate, and use information. Students:

- a. plan strategies to guide inquiry.
- b. locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media.
- c. evaluate and select information sources and digital tools based on the appropriateness to specific tasks.
- d. process data and report results.

4. Critical Thinking, Problem Solving, and Decision Making

Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources. Students:

- a. identify and define authentic problems and significant questions for investigation.
- b. plan and manage activities to develop a solution or complete a project.
- c. collect and analyze data to identify solutions and/or make informed decisions.
- d. use multiple processes and diverse perspectives to explore alternative solutions.

5. Digital Citizenship

Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior. Students:

- a. advocate and practice safe, legal, and responsible use of information and technology.
- b. exhibit a positive attitude toward using technology that supports collaboration, learning, and productivity.
- c. demonstrate personal responsibility for lifelong learning.
- d. exhibit leadership for digital citizenship.

6. Technology Operations and Concepts

Students demonstrate a sound understanding of technology concepts, systems, and operations. Students:

- a. understand and use technology systems.
- b. select and use applications effectively and productively.

- c. troubleshoot systems and applications.
- d. transfer current knowledge to learning of new technologies.

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Grades PK–2 (Ages 4–8)

The following experiences with technology and digital resources are examples of learning activities in which students might engage during PK-Grade 2 (Ages 4-8):

1. Illustrate and communicate original ideas and stories using digital tools and media-rich resources. (1,2)
2. Identify, research, and collect data on an environmental issue using digital resources and propose a developmentally appropriate solution. (1,3,4)
3. Engage in learning activities with learners from multiple cultures through e-mail and other electronic means. (2,6)
4. In a collaborative work group, use a variety of technologies to produce a digital presentation or product in a curriculum area. (1,2,6)
5. Find and evaluate information related to a current or historical person or event using digital resources. (3)
6. Use simulations and graphical organizers to explore and depict patterns of growth such as the life cycles of plants and animals. (1,3,4)
7. Demonstrate safe and cooperative use of technology. (5)
8. Independently apply digital tools and resources to address a variety of tasks and problems. (4,6)
9. Communicate about technology using developmentally appropriate and accurate terminology. (6)
10. Demonstrate the ability to navigate in virtual environments such as

electronic books, simulation software, and Web sites. (6)

Grades 3–5 (Ages 8–11)

The following experiences with technology and digital resources are examples of learning activities in which students might engage during Grades 3-5 (Ages 8-11):

1. Produce a media-rich digital story about a significant local event based on first-person interviews. (1,2,3,4)
2. Use digital-imaging technology to modify or create works of art for use in a digital presentation. (1,2,6)
3. Recognize bias in digital resources while researching an environmental issue with guidance from the teacher. (3,4)
4. Select and apply digital tools to collect, organize, and analyze data to evaluate theories or test hypotheses. (3,4,6)
5. Identify and investigate a global issue and generate possible solutions using digital tools and resources (3,4)
6. Conduct science experiments using digital instruments and measurement devices. (4,6)
7. Conceptualize, guide, and manage individual or group learning projects using digital planning tools with teacher support. (4,6)
8. Practice injury prevention by applying a variety of ergonomic strategies when using technology. (5)
9. Debate the effect of existing and emerging technologies on individuals, society, and the global community. (5,6)
10. Apply previous knowledge of digital technology operations to analyze and solve current hardware and software problems. (4,6)

Grades 6–8 (Ages 11–14)

The following experiences with technology and digital resources are examples of learning activities in which students might engage during Grades 6-8 (Ages 11-14):

1. Describe and illustrate a content-related concept or process using a model, simulation, or concept-mapping software. (1,2)
2. Create original animations or videos documenting school, community, or local events. (1,2,6)
3. Gather data, examine patterns, and apply information for decision making using digital tools and resources. (1,4)
4. Participate in a cooperative learning project in an online learning community. (2)
5. Evaluate digital resources to determine the credibility of the author and publisher and the timeliness and accuracy of the content. (3)
6. Employ data-collection technology such as probes, handheld devices, and geographic mapping systems to gather, view, analyze, and report results for content-related problems. (3,4,6)
7. Select and use the appropriate tools and digital resources to accomplish a variety of tasks and to solve problems. (3,4,6)
8. Use collaborative electronic authoring tools to explore common curriculum content from multicultural perspectives with other learners. (2,3,4,5)
9. Integrate a variety of file types to create and illustrate a document or presentation. (1,6)
10. Independently develop and apply strategies for identifying and solving routine hardware and software problems. (4,6)

Grades 9–12 (Ages 14–18)

The following experiences with technology and digital resources are examples of learning activities in which students might engage during Grades 9-12 (Ages 14-18):

1. Design, develop, and test a digital learning game to demonstrate knowledge and skills related to curriculum content. (1,4)
2. Create and publish an online art gallery with examples and commentary that demonstrate an understanding of different historical periods, cultures, and countries. (1,2)
3. Select digital tools or resources to use for a real-world task and justify the selection based on their efficiency and effectiveness. (3,6)
4. Employ curriculum-specific simulations to practice critical-thinking processes. (1,4)
5. Identify a complex global issue, develop a systematic plan of investigation, and present innovative sustainable solutions. (1,2,3,4)
6. Analyze the capabilities and limitations of current and emerging technology resources and assess their potential to address personal, social, lifelong learning, and career needs. (4,5,6)
7. Design a Web site that meets accessibility requirements. (1,5)
8. Model legal and ethical behaviors when using information and technology by properly selecting, acquiring, and citing resources. (3,5)
9. Create media-rich presentations for other students on the appropriate and ethical use of digital tools and resources. (1,5)
10. Configure and troubleshoot hardware, software, and network systems to optimize their use for learning and productivity. (4,6)

Student Achievement:

Blended learning environments will be integral to the successful integration of technology in our classrooms and increasing student test scores. Teachers will be provided online learning environments via our course management systems (MOODLE). They will be provided training opportunities on how to effectively teach in these online environments. Classroom content and key ideas will be enforced through the creation of multimedia rich modules in MOODLE whose purpose is to engage learners and facilitate instruction through the use of technology.

Other online resources such as Compass Learning and PLATO will continue to be rolled out. This software promotes differentiated instruction which allows for the ability to customize learning experiences as per the individuals needs.

Technology integration into curricula is continuous. We strongly encourage our teachers to take advantage of the many professional development opportunities that our Model Schools support staff offer on a monthly basis.

As teachers become more comfortable with the technology we will encourage them to do more with these resources on a daily basis in their classroom.

Career and Technical Institute Student Achievement:

CTI receives technical support from a shared building Sysop (SYSTEM OPERATOR) through the DC Boces Instructional Services Division, other support is though a contractor, CSI (Computer Systems Integrators) which supports server maintenance and LAN troubleshooting and repair.

Timetable/Timeline

Our plan implements our goals over a three year period, keeping in mind that many strategies will include ongoing assessments and evaluations.

Periodic development of strategies for the delivery of specialized courses will require in-depth review for marketability of the trade. Using the Department of Labor, both at the Federal and State level will ensure a complete market picture is realized before committing technology resources toward a specialized course of study. Many of those strategies to implement integration of technology is based on a three year plan. CTI has a parent distance learning location and is used by many outlying school district to communicate specific topics for discussion and review. As a host station, CTI provides support to 13 school districts who can utilize the available services, as well as our own students.

Below is the Three Year plan:

By the end of Year 1:

- Students will explore careers utilizing Career Zone (Every Student will have a Career Plan)
- Students will gain a general understanding of computer literacy evidenced by PC skills employed through the PLATO Learning systems and their Technology Literacy (English) integrated course.
- Students will be assigned community based internships (Career Exploration Internship Program (CEIP) and complete electronic employability profiles.
- Staff will establish new contacts for consulting committees (annual recurring requirement).
- Students will receive 5 week reports and quarterly grades generated from a locally designed student management system (SMS).
- Staff will attend 3 professional development seminars increasing the awareness of the importance of integrating technology into the regular curriculum.
- Staff will report student progress & quarterly grades via the SOLR computer SMS.
- Staff will correspond via e-mail daily.
- Staff will be trained on newly purchased academic software and “SMART BOARD” systems.
- Staff will utilize a computer based reporting system called HEAT to maintain proper functioning and maintenance of existing technology.
- The Technology Committee will meet as needed.
- Staff and Students will read and accept EULA (Electronic User Licensing Agreement) with each PC access.
- Newly hired staff will complete a technology self-assessment.

By the end of Year 2:

- Students will complete an electronic trade portfolio via Career Zone.
- Students will investigate post-secondary education via the web.
- Staff will report and maintain student attendance daily, via the SOLR SMS.
- Staff will implement new software/programs into curriculum.
- Staff will collaborate with the consultant committee.
- Staff will receive electronic updates via e-mail with the S.E.D. link.
- Staff will electronically submit work order requests using the HEAT system.
- Staff will be able to create, store and retrieve folders in their own assigned network directory.
- Staff will utilize the Internet to seek information to complement their lesson plans.
- All staff will complete a technology self-assessment.
- The Technology Committee will inventory progress of the plan.

By the end of Year 3:

- All staff will utilize a computerized grade book.
- Staff will create web pages for programs including links to community related resources.
- Staff will be able to troubleshoot minor hardware problems.

- A computerized electronic grading system will be designed to provide access to students and parents.
- Staff will implement electronic media to teach select lessons.
- Staff will serve as technology mentors to newly hired staff.
- The Technology Committee will draft new initiatives to address in the next plan.

Technology Delivery:

Dutchess BOCES currently enjoys a robust network for us to deliver instructional technology related material to our classrooms. We have implemented favorable contracts for internet bandwidth and Wide/Local Area Network (WAN/LAN) related services. These contracts afford us the ability to increase our capacity in affordable increments should our usage go beyond our current capacity.

Across these networks we provide access to:

- **MOODLE** – Our Learning Management System (LMS)
- **Video Conferencing Bridge** – Polycomm equipment: Connects classrooms with peers in other classrooms, or to outside organizations through which we can promote real time experiential learning opportunities.
- **Web Based Resources** – Web 2.0 Tools, Student Information Systems, Teacher Resources, Online curriculum based content (ie: SMART Note Book software), Online instructional tools / applications, Compass Learning, and PLATO.
- **Video on Demand Systems** – Video on Demand systems such as VBrick, Ensemble Video, Power Media Plus etc.
- **Network File/Print Sharing** – Internal BOCES resources for saving / printing files.
- **Virtual Applications** – Servers, applications, and desktops will be delivered via virtual systems which are run from and maintained on the network.

Parental Communications & Community Relations:

Our primary resource for communication our Technology Plan to the public will be our Dutchess BOCES webpage: <http://www.dcboces.org/publications/>

Parental support and involvement is very important to us. We will continue to provide opportunities for parents to see the technology their children use in the classroom. These opportunities include, but are not limited to ‘open house’, science fairs, career day, parent teacher conferences, parents as reading partners, public board meetings, and publications offered by our various Dutchess BOCES divisions.

We will also invite feedback by parents who have attended these events or reviewed our publications. We can continue to improve our use of technology by asking for ideas, thoughts,

and or feelings about how parents and members of our community view our technology related practices.

Collaboration:

Dutchess BOCES specializes in the Andragogy of our communities adult population. Our adult education staff will have access to the same professional development opportunities that our K12 instructors do. They will also have access (upon request) to our LMS System and other online resources.

While we do welcome the possibilities of collaborating with our adult education population we will maintain strict security policies that will ensure we do not allow K12 students and adult education students onto the same resources. Similar resources can be provided to both groups of learners, but they will remain as separate learning environments which are disparate of each other.

Our CTI facilities are shared facilities with our Adult Education Division; this unique partnership allows us to influence the use of technology with our Adult population that uses our facilities during evening hours. As such technology in all our facilities are co-shared and provided for the following course offerings in Adult Education:

Dutchess County BOCES Adult Education Program Courses

ARTS & CRAFTS

- Floral Arranging
- Advanced Floral Arranging
- Holiday Wreath Workshop
- Holiday Centerpiece Workshop
- Silk Flower Arranging
- Market Gardening
- Cro-Knitting
- Make & Form Crafts
- Figure Drawing for all Levels
- Painting with Acrylics
- Anyone Can Paint Using Water Colors, Oils or Pastels
- Decorative Painting for the Home
- Preserving Your Photos
- Jewelry Sculpture and Design Made Easy

AUTOMOTIVE

- Auto Body Repair I
- Auto Body Repair II
- Auto Body Repair III
- Auto Mechanics – Module A
- Auto Mechanics – Module B
- Small Engine Repair
- U Auto Know How
- Starting UP a Successful Automotive Repair Business

BUILDING & CONSTRUCTION TRADES

- Arc Welding I
- Arc Welding II
- Arc Welding III
- Oxy-Acetylene Welding
- Cabinetmaking I
- Cabinetmaking II
- Carpentry – Module A
 - Carpentry – Module B
 - Build a Proud Deck

CABLE TECHNOLOGY

- Cable Specialist

COACHING

- CPR and First Aid Training

CULINARY-HOSPITALITY

- Travel and Tourism Training I
- Travel and Tourism Training II
- Bed & Breakfast: How to Begin and Continue a B&B
- Bartending
- Food Safety Training and Certification Test
- Cooking Techniques CNC

TRAINING COPY MACHINE REPAIR

- Copy Machine Repair

COMPUTER TECHNOLOGY

- LAN/WAN Technician
- PC Trouble Shooting and Repair for IBM Compatibles
- Trouble Shooting PC Computers; Crisis Management and Data Recovery
- CISCO COMPUTER SKILLS
- Introduction to Computers
- Introduction to Computers for Seniors I
- Keyboarding
- Introduction to Windows 95
- Introduction to MS Office
- Microsoft Word
- Microsoft Excel
- Microsoft Access
- Microsoft PowerPoint
- Windows 3.1 Introduction
- WordPerfect 6.1 for Windows Level I
- WordPerfect 6.1 for Windows Level II
- Lotus 1-2-3 for Beginners
- Introduction to Desktop Publishing
- Introduction to PageMaker
- Starting Your Own Newsletter
- • You/The Computer/The Internet

DRIVING RELATED

- 5-hour Pre-licensing
- Defensive Driving

EDUCATION

- Identification and Reporting of Child Abuse and Maltreatment
- Sign Language

ELECTRICAL/ELECTRONICS

- Electronics I

- Electronics II
- Introduction to Electricity
- Residential House Wiring I
- Residential House Wiring II
- Commercial Electricity
- Industrial Electricity
- National Electric Code – Update
- FINANCIAL**
- Bookkeeping and Accounting I
- Bookkeeping and Accounting II
- Investment Starter
- Stock Options as a Strategic Investment
- Successful Money Management
- Financial Strategies for Successful Retirement
- HEALTH SERVICES**
- Nursing Assistant Certification
- CPR and Choking Procedures: Pediatric
- CPR: Adult/Child/Infant
- OSHA Training
- H.V.A.C.
- Refrigeration and Air Conditioning I
- Refrigeration and Air Conditioning II
- Refrigeration and Air Conditioning III
- Certification for Handling Refrigerant
- H.V.A.C. Job Preparation Course
- Basic Plumbing Repairs
- Plumbing and Heating I
- Plumbing and Heating II
- Commercial Boiler Room Maintenance
- MEDICAL OFFICE SKILLS**
- Medical Transcription
- Administrative Medical Office Assisting I
- Administrative Medical Office Assisting II
- NAIL TECHNOLOGY**
- Nail Specialty I
- Nail Specialty II
- Nail Specialty III
- Basic Manicuring
- REAL ESTATE**
- Real Estate Salesperson Qualifying Course
- Inspecting Your New Prospective Home
- SELF HELP**
- Why Diets Don't Work: Losing Weight the Natural Way
- Self Healing/Mind Body
- Smoking Cessation
- Basic Self Defense for Men and Women
- SPECIAL INTEREST**
- Model Railroading
- Basic Bike Repair and Maintenance
- One-Day Piano Workshop
- How to Play Piano by Ear
- Horsemanship

Internet Safety:

For Students:

Age appropriate Internet Safety curriculum and strategies for delivering

The students at SPC/BETA/District classes participate in internet safety curriculum based on today's technology. An outline of specific strategies to promote age appropriate safe and responsible internet usage is included in the Character Education initiative for SPC and District classes.

An overview of internet safety for BETA students is available in an age appropriate instructional format. Herein are some areas:

- Lessons pertaining to internet
- As part of BOCES policy # 7161, it is incumbent upon intake students enrolled in classes at BETA sign an Acceptable Use form
- Each teacher provides students with a overview of general overview of Internet Safety at the start of each school year
- Publication regarding Internet Safety form www.socialsafety.org
- Certified Instructor of Internet Safety is part of Technology Divisional Committee
- At Open House parents receive internet safety information

Over the next 3 years, the divisions Technology Committee will modify internet safety based on factors such as infrastructural needs, actual instruction, and technological innovation. In part, the committee will continually analyze the needs of the agency, while keeping in mind cost effectiveness.

For Staff:

Internet Safety will be provided via an online webinar and an accompanying LMS course. Internet safety is an important issue that educators must consider as technology becomes more prevalent in the classroom. Our strategy includes using resources from a number of organizations, including the [i-SAFE](#) program (which seeks to provide training to students and teachers in order to help them recognize and avoid dangerous, destructive, or unlawful online behavior). Strategies will also include examining current issues regarding internet safety, and appropriate methods of response.

Other topics include:

- ISTE NETS-S Standard 5, ISTE NETS-T Standard 4
- The Social Web

- Cyber Citizenship, Ethics, and Cyber Safety
- Copyright and Intellectual Property
- Strategies for Safe Schools

Through these means, all participants will be able to:

- Explain ISTE NETS-S Standard 5 and NETS-T Standard 4
- Implement internet safety concepts and practices to prepare for student issues
- Access resources to assist teachers in addressing internet safety issues
- Recognize warning signs of cyber bullying and other cyber security issues
- Develop practices for safe schools
- Recognize copyright and intellectual property issues

Professional Development:

Dutchess BOCES will align its Instructional Technology Professional Development programs and goals with:

- [National Educational Technology Standards \(NETS•T\) and Performance Indicators for Teachers](#)
- [National Educational Technology Standards \(NETS•A\) and Performance Indicators for Administrators](#)

Details for each of these standards can be found by either clicking on the links above, or by visiting the www.iste.org website.

Dutchess BOCES Model Schools program will continue to make Spring, Summer, and Fall Workshops available to our teachers and staff. Topics for these workshops are based on feedback from the educators and staff members here at the BOCES and in our region. The workshops are then cataloged and presented to our district leaders, school administrators, staff, and teachers both as links to the information on the [Dutchess BOCES Model Schools](#) website and via printed material.

The topics covered in these workshops are very much focused on enhancing the learning experiences of students through the use of technology. Introductory as well as advanced sessions are held on topics such as using MOODLE which are geared to systematically increase the overall effectiveness of the applications respective classroom integration. Examples of these training opportunities are available on our [Model Schools MOODLE](#). For an overview of the most recent Spring 2010 Catalog please see **Appendix A** in this technology program.

Other training opportunities are available that include “in building” Technology Integration Specialists. These qualified staff members will work with teachers during their free periods. This way the educator can receive one on one training to create meaningful learning

opportunities through the use of technology.

Online web based learning modules will continue to be available for further asynchronous professional development opportunities. These learning modules are also available on our [Dutchess BOCES Model Schools](#) website.

Supporting Resources:

Online publications such as our AUP, and Professional Development Catalogs can be found on our Dutchess BOCES website: <http://www.dcboces.org/publications>

Access to our internal Help Desk as well as our online Help Desk Ticketing system: <http://helpdesk.dcboces.org/heatselfservice>

Access to our online iCampus Model Schools Program website: <http://galileo.dcboces.org/icampus/course/view.php?id=317>

Help Desk services:

- Phone support for End User problems.
- Monitoring of IP connected devices.
- System and Infrastructure support (remote & on site) for wide range of OS and network related technology.

SYSOP training:

- 4 Annual training sessions for our technical staff.
 - Past topics have included:
 - Properly managing an Active Directory infrastructure
 - Migrating Wireless Access to the latest 'N' standard
 - Open Source software solutions

Purchasing of Instructional Hardware & Software:

- Purchasing could include finance purchase programs.

In house solutions for the following items:

- Email Archiving
- Centralized Backups
- Compass Learning
- Internet Connectivity
- Cisco Certified LAN/WAN Support
- Web Filtering
- Spam Filtering

- Antivirus Software

Optional Services include:

- Shared Technicians (based on .2 FTE annually)

Online ISTE standards found at iste.org:

[National Educational Technology Standards \(NETS•T\) and Performance Indicators for Teachers](#)
[National Educational Technology Standards \(NETS•A\) and Performance Indicators for Administrators](#)

Regional resources include the following committees:

- Instructional Technology Services Advisory Committee (ITSAC)
- Committee for Applied Instructional Technology (CAIT)
- Regional Instructional Technology Committee (RITC)
- Joint Management Team (JMT)
- Mid Hudson Region Teacher Center
- Mid Hudson Regional Information Center

Increase Access:

The diversity of our student population and that of our staff is one of the attributes we are most proud of in our learning community. Serving our entire student body equally and supporting the interaction of our learners with our learning systems and facilities is an absolute priority here at Dutchess BOCES. Knowing this, we will deploy effective strategies of ensuring we meet the demands of our students and staff.

It is our districts policy to utilize computer resources for as long as possible. In order to extend the service life of our existing equipment and cost-effectiveness of the computers purchased with public funds we have established the following guidelines:

- We employ skilled technicians who repair and maintain computers and their peripherals. In doing so we can often redeploy serviced hardware to the inventory and avoid immediate purchases of new equipment.
- We have a hardware refresh cycle through which we purchase ‘x’ number of new computers annually and deploy these newer machines in labs, libraries, and classrooms where the demand is the highest. The older machines are then redeployed based on demand for machines where there otherwise are none.
- Machines that are no longer in line with classroom instruction are evaluated for their remaining value and deployed to administrative/clerical offices where they can still perform desired services.

By following these simple guidelines Dutchess BOCES ensures that our inventory of computers/Instructional Technology is maintained at a level appropriate for access to curriculum and administrative resources.

To ensure that we are meeting the highest levels of ADA compliance adaptive technology and common sense practices will be commissioned whenever and wherever possible to make sure that everyone has equal access to our facilities and resources. (www.ada.gov).

Equitable access to Instructional Technology includes but is not limited to the following:

- Adaptive technology will be made available when required (ie):
 - Voice recognition software will be available to those who have difficulty using a computer mouse.
 - Screen readers for those who are visually impaired.
 - Other various input/output peripherals which make interaction with the pc easier.

Dutchess BOCES will also begin to explore ways in which we can deliver access to files and applications virtually in a web browser. Products and solutions from companies such as [StoneWare Inc](#) will allow for anytime access from just about any device to systems and services housed in a private cloud computing environment. But leveraging such technology we will be able to maintain strict security settings while allowing for greater access to BOCES resources.

Technology and Related Services:

Career and Technical Institute:

INVENTORY:

CTI Building	Computer Labs	Class rooms	Library or Media Ctr	Admin Offices	Other Location	<u>Planned Year 1</u>	<u>Future Year 2</u>	<u>Acquisitions Year 3</u>
Computers (List by type)								
a. Dell Workstations	80	250	5	15	2	50	75	50
b. Dell Laptops Wireless Capable	75 All	5 All	0	3 All	0	50	50	50
c. IBM Workstations and others	20							
Mobile Wireless Carts	4	1	0	0	0	2	2	2
Number of computers listed above	All	All	All	All	All			

that are internet ready								
Number of computers listed above equipped for multimedia	All	All	All	All	All			

Peripheral Devices	Computer Labs	Class rooms	Library or Media Ctr	Admin Offices	Other Location	<u>Planned Year 1</u>	<u>Future Year 2</u>	<u>Acquisitions Year 3</u>
Printers	10	30	2	5	2	3	6	3
Scanners	2	2	1	1	0	2	4	2
Modems (28.8 kbps or above)	0	0	0	0	0	0	0	0
Assistive /Adaptive Devices	2	2	1	0	0	2	2	2
Digital and movie Cameras	0	10	1	1	0	5	8	5
TV Monitors	6	40	1	1	0	10	5	10
VCRs/DVDs disk players	6	40	1	1	0	10	5	10

Projection Devices	6	10	1	1	0	5	3	5
Satellite Dishes	0	0	0	0	0	0	0	0
Other								
Plasma TVs	2	0	0	0	0	1	2	1

Software	Computer	Class	Library	Admin	Other	<u>Planned</u>	<u>Future</u>	<u>Acquisitions</u>
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(list by type)	Labs	rooms	or Media Ctr	Offices	Location	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>
Computer Associates Anti Virus network	Enterprise Licensing for entire building					1	1	1
Student Management System (SOLR)	Enterprise Licensing for entire building					1	1	1
Microsoft OS Licensing (volume licensing)	500	500	2	10	1	250	100	250
Microsoft Office Licensing	500	500	2	10	1	250	100	250
Autocad Lite	24					25	24	24
Plato Learning Licensing	50	50	10	0	0	50	50	50
Mitchell On Demand Network		3			1	4	4	4

Network Equipment	Computer Labs	Class rooms	Library or Media Ctr	Admin Offices	Other Location	<u>Planned Year 1</u>	<u>Future Year 2</u>	<u>Acquisitions Year 3</u>
Hubs	80	16	2	8	8	20	10	20
Routers					6	1	2	1
Servers					2	1	1	1
Wireless Radios for internet access					20	10	5	10

Telecomm Links								
Full T1	40	4	1	6	3	4	4	4
Fiber Optic LAN					1	0	0	0

Future Telecomm Systems Cisco	Computer Labs	Class rooms	Library or Media Ctr	Admin Offices	Other Location	<u>Planned Year 1</u>	<u>Future Year 2</u>	<u>Acquisitions Year 3</u>
Infrastructure support					1	1	1	1
IP Telephones	7	40	2	15	5	10	20	25

Alternative and Special Education:

Technology Assessment Inventory

Mar-10

	Computer Labs Beta	Class-rooms SPED	Class-rooms Beta	Class-Rooms Districts	Library or Media Ctrs	Admin Offices	Related Services	Other Locations	Totals	Planned Future Acquisitions		
										Year 1	Year 2	Year 3
Computers												
A. Desktops	19	51	49	35	3	21	22		200	7	12	13
B. Laptops	0	48	28	15	0	3	16		110	47	33	39
Totals	19	99	77	50	3	24	38		310	54	45	52
Desktops Age												
9 yrs	0	0	4	0	1	0	0		5	0	0	0
8 yrs	0	8	1	0	1	0	1		11	0	0	0
7 yrs	11	0	0	1	0	0	0		12	0	0	0
6 yrs	0	1	6	3	1	2	0		13	0	0	0

5 yrs	3	10	0	1	0	0	0	14	0	0	0	
4 yrs	4	13	22	4	0	9	8	60	0	0	0	
3 yrs	0	9	5	10	0	4	0	28	0	0	0	
2 yrs	1	6	11	13	0	5	12	48	0	0	0	
1 yr	0	0	0	0	0	0	0	0	0	0	0	
new	0	4	0	3	0	1	1	9	7	12	13	
<hr/>												
Laptops Age												
9 yrs	0	0	0	0	0	0	0	0	0	0	0	
8 yrs	0	0	0	0	0	0	0	0	0	0	0	
7 yrs	0	0	0	0	0	0	0	0	0	0	0	
6 yrs	0	0	0	0	0	0	0	0	0	0	0	
5 yrs	0	23	2	0	0	0	0	25	0	0	0	
4 yrs	0	23	1	0	0	0	9	33	0	0	0	
3 yrs	0	0	0	12	0	2	3	17	0	0	0	
2 yrs	0	2	25	3	0	1	3	34	0	0	0	
1 yr	0	0	0	0	0	0	0	0	0	0	0	
new	0	0	0	0	0	0	1	1	47	33	39	
<hr/>												
Totals	19	99	77	50	3	24	38	0	310	47	33	39

Budget and Timetable:

Dutchess County BOCES has and will continue to seek grant based and other funding opportunities to assist us in expanding educational services to our classrooms. We have enjoyed the benefits of these opportunities in the past and will realize the importance of such programs in

creating a high quality learning environment that is enhanced through the use of instructional technology.

Career and Technical Institute:

Proposed Year One	Amount Projected	Projected Cost
Computers	25	48,000.00
Audio/Visual Projectors	10	9,000.00
Laptop Computers	20	39,000.00
Support Software Licenses	75	12,000.00
Laser Color Printers	6	9,000.00
CAD Software Programs	2	10,000.00
Digital Cameras	3	1,500.00
Macintosh Computers	5	10,000.00
Digital Drawing Pads	10	2,000.00
Computer Interface Adapters for Scientific Experiments	10	5,000.00
A+ Laboratory	12	38,000.00
Repair/Maintenance		17,500.00
Class Presentation and Assessment Equipment	4	12,000.00
Visual Display Screens	4	500.00

BENCHMARKS AND ASSESSMENTS

Year One

- Benchmark #1: All students will have under development an electronic personal inventory, and have the ability to explore careers electronically.
Career Zone
- Benchmark #2: All teachers will demonstrate the ability to use scanners, digital and video cameras and computer based data collecting devices.
Professional Development
- Benchmark #3: Programs in engineering, health service and human services clusters will exhibit or support new and emerging trade specific technologies.

Proposed Year Two	Amount Projected	Projected Cost
Televisions	5	2,400.00
VCR Recorders	10	5,100.00
DVD Players	5	500.00
DVD Recorders	10	7,900.00
Micro-Flex Digital Photography Cameras	4	4,100.00
Printer/Scanner Equipment	5	3,200.00
Internet-Protocol (IP) Support Equipment	1	12,000.00
Electronic Fuel Injection Testing Tools	1	10,000.00
Electronic Calculators	25	1,900.00
Business Support Software	25	11,000.00
Palm Pilots and supporting software and equipment	20	12,000.00
Pocket PC's and supporting software	10	6,000.00
Tablet PC's	5	11,000.00
Computers	25	48,000.00
A+ Lab Updates	12	37,000.00
Repair/Maintenance		26,000.00

BENCHMARKS AND ASSESSMENTS

Year Two

- Benchmark #1: All teachers will demonstrate the students and classroom management software and its application in their program.
- Benchmark #2: Programs in Arts and Humanities Services, Agriculture and Health Service Clusters will exhibit or support new and emerging trade specific technologies.
- Benchmark #3: All students will have under development an electronic portfolio demonstrating the CDOS Framework Standards

Proposed Year Two	Amount Projected	Projected Cost
Televisions	5	2,400.00
VCR Recorders	10	5,100.00
DVD Players	5	500.00
DVD Recorders	10	7,900.00
Micro-Flex Digital Photography Cameras	4	4,100.00
Printer/Scanner Equipment	5	3,200.00
Internet-Protocol (IP) Support Equipment	1	12,000.00
Electronic Fuel Injection Testing Tools	1	10,000.00
Electronic Calculators	25	1,900.00
Business Support Software	25	11,000.00
Palm Pilots and supporting software and equipment	20	12,000.00
Pocket PC's and supporting software	10	6,000.00
Tablet PC's	5	11,000.00
Computers	25	48,000.00
A+ Lab Updates	12	37,000.00
Repair/Maintenance		26,000.00

BENCHMARKS AND ASSESSMENTS

Year Two

- Benchmark #1: All teachers will demonstrate the students and classroom management software and its application in their program.
- Benchmark #2: Programs in Arts and Humanities Services, Agriculture and Health Service Clusters will exhibit or support new and emerging trade specific technologies.
- Benchmark #3: All students will have under development an electronic portfolio demonstrating the CDOS Framework Standards

Proposed Year Three	Amount Projected	Projected Cost
UPC Code Writer and Reader/Scanners	2	7,000.00
Cash Register/Computers	2	15,000.00
Computers	25	48,000.00
AVID Digital Video Editing Systems	3	24,900.00
Prosumer Digital Video Cameras	4	6,800.00
SMART Technology Boards	4	10,000.00
Plato Software Licenses and Support	25	30,000.00
VSR – Micro Sun Management Data Systems	1	3,000.00
Digital Analog Research Microscope	1	4,000.00
Repair/Maintenance	1	18,000.00

BENCHMARKS AND ASSESSMENTS

Year Three

- Benchmark #1: All teachers will demonstrate knowledge and applications of the new technologies in their specific career major fields.
- Benchmark #2: First student completes their electronic portfolio and presents them to employers.
- Benchmark #3: Programs in Art/Humanities, Engineering and Public Service Clusters will exhibit or support new and emerging trade specific technologies.

Perkins Grant Proposal Submitted in 2009:

Further implementation of our current technology plan, calls for changing to a new server blade system; this system will afford administrative oversight of teacher and student server based directories, will ease the functionality of systems for all staff, faculty and students. This major effort will modernize our information technology (IT) infrastructure, providing faster access to internet services, increase bandwidth and allow for a safe filtered internet service for our online communities.

Continuing Major Efforts: New blade server has been acquired and infrastructure support has been increased by 80%, allowing a smooth transition of archived data and current student management systems. There is less “server down” time which increases our efficiency in data management. This modernization will not need to be changed or upgraded for approximately 5 years. At the 5 year mark, another need analysis will need to be conducted to see if further upgrade of our server systems need attention. The information technology (IT) services are supporting our current needs because of this additional new blade server. Two Smart boards were added to computer labs, including supporting “Notebook” software allowing teachers to

technology based lesson plans that are readily available through server services. The acquisition of two mobile computer labs capable of holding over 24 computer laptops were purchased allowing more student access to internet-based learning. The final installation and upgrade of our center's wireless services has increased our teachers, students and administrative support capability to function anyway in the building or on campus. The purchase of Adobe software programs has added to our capability of delivering online instructional content for our students, and parental communities. Teachers are constantly receiving professional development teaching them how to deliver online content to our students.

This major effort will continue to provide students with more opportunities to become even more efficient in the use of technology integrated into their classroom milieu. Providing these improved services will continue to assist our students to become competitive in the 21st century, with 21st century work force ready skills, allowing them to become better prepared for post secondary education and the world of work.

Activities to achieve the objectives and timeline:

Further acquisitions in computer technology, online services, pre-employment training, and improved academic remediation, increased professional development in technology integration and in the development of online services to include blogs, wikis and teacher- developed websites are the necessary activities to achieve our major effort. The timeline to implement these objectives need to be reviewed on a quarterly basis to ensure a timely implementation schedule is achieved at the end of the academic year. Make available to all teachers and staff the necessary professional development to achieve these services for our students and community. Through the use of Model Schools training, third party professional development courses, teacher conferences and locally devised training opportunities should allow us to achieve these objectives within a specific two year plan.

Evaluation:

Develop quarterly meetings to review our efforts in achieving our major efforts. Self-inspection checklists, along with establish benchmarks and longitudinal data will provide us with enough tools to manage our objectives in a timely manner. A student initial evaluation should be developed that can give us a base line on their computer and technology skills. At the end of an academic year, develop a follow up survey to determine what occupational skills have been gained by students. Develop a teacher survey to see how effective the delivery of professional development activities and procedures used to demonstrate outcomes realized by students through improved and newly acquired technology.

Synopsis of proposed evaluations:

- Quarterly meetings to review efforts
- Self Inspection checklists
- Establish benchmarks and longitudinal data to evaluate objectives
- Develop initial student evaluation/survey
- Develop a follow-up student survey to evaluate student gains
- Develop a teacher survey to evaluate effectiveness of training
- Develop these services through an online delivery system

Starting in September of 2009, re-establish the Technology Committee with efforts to meet on a quarterly basis to establish benchmarks in order to review our “major effort’s evaluations

Developed an initial student and follow-up evaluation/survey, estimated completion date: June 2009

A teacher survey was developed in 2008, survey report 1 is available in the final narrative report for 2009.

Teacher survey was developed: How did you, as a Career & Technical Education teacher meet the CDOS Standard 1: "**students will be knowledgeable about the world of work, explore career options, and related personal skills, aptitudes, and abilities to future career decisions?**" Survey report 2 is available in the final narrative report for 2009.

Over the past three years, monthly “Model Schools” professional development training has been conducted. Approximately, 180 hours of professional development training has been conducted per year. This is based on 6 hours of training available on a monthly basis for 10 months, with an average of three (3) teachers attending training every month.

A model schools training effectiveness report survey was developed in June 2009.

Alternative and Special Education:

To support this plan over the next 3-year cycle, an annual technology budget of between \$35,000 and \$50,000 would be required. This is based upon current market price quotes. As the market rapidly changes, planning for technology acquisitions over a 3-year period is challenging.

We will continue our previous plan of upgrading existing classroom workstations. At the same time, we will plan for a new location for the Alternative High School to include **Dell GX 760’s**.

Additional technology acquisitions should include digital cameras for each program. Our current cameras are obsolete and cameras are required for the documentation of student alternate assessments.

Each department of this division has attached such a schedule to approximate the cost of technology over the next 3 years.

Alternate High School

3-Year Technology Projection Schedule

Year 1

<u>Qty.</u>	<u>Equipment Description</u>	<u>Cost</u>
5	Smartboard(s) wall mount package	@\$2,500 each=\$12,500
15	Laptops (Assigned to teachers)	@\$400 each=\$6,000

Year 2

<u>Qty.</u>	<u>Equipment Description</u>	<u>Cost</u>
5	Smartboard(s) wall mount package	@\$2,500 each=\$12,500
15	Laptops (Assigned to teachers)	@\$400 each=\$6,000

Year 3

<u>Qty.</u>	<u>Equipment Description</u>	<u>Cost</u>
15	Laptops (Assigned to teachers)	@\$400 each=\$6,000
10	Smartboard(s) with wall mount package	@\$2,500 each=\$12,500
12	Laptops with rolling cart	@\$600 each=\$7,200 plus \$2,000 cart

SPC

3-Year Technology Projection Schedule

Year 1

<u>Qty.</u>	<u>Equipment Description</u>	<u>Cost</u>
1	Projector for Gymnasium Accessories	\$4,000
1	Screen	\$1,500
12	Laptops with rolling cart	\$600 each=\$7,200 plus \$2,000 cart

Year 2

<u>Qty.</u>	<u>Equipment Description</u>	<u>Cost</u>
12	Laptops for rolling cart	@\$600 each=\$7,200
1	Nintendo Wee Fit w/ Accessories	\$500

Year 3

<u>Qty.</u>	<u>Equipment Description</u>	<u>Cost</u>
24	Laptops for rolling cart	@\$600 each=\$14,000

Note: Proposed SPC initiative for students grades 6 – 8: 1 netbook for each student.

Approximately: 50 students @ \$300 = \$15,000.

Related Services

3-Year Technology Projection Schedule

Year 1

<u>Qty.</u>	<u>Equipment Description</u>	<u>Cost</u>
5	Ducks Berry	\$300
5	Jaws	\$300
5	Upgrade BASC software	\$250
4	Laptops (Vision Teachers)	@\$600 each=\$2,400
4	Laptops (Teacher of the Deaf)	@\$600 each=\$2,400
1	Hand-held Dynavox (AT staff)	\$7,000
1	Upgrade Desktop (AT staff)	\$600

Year 2

<u>Qty.</u>	<u>Equipment Description</u>	<u>Cost</u>
4	Laptops (Teacher of the Deaf)	@\$600 each=\$2,400
1	Hand-held Dynavox (AT staff)	\$7,000
1	Desktop (Counseling staff)	\$600
1	Keyboard (Counseling staff)	\$200
1	Desktop (AT staff)	\$600

Year 3

<u>Qty.</u>	<u>Equipment Description</u>	<u>Cost</u>
1	Laptops (Teacher of the Deaf)	\$600
1	Desktop (Counseling staff)	\$600
1	Keyboard (Counseling staff)	\$200

District-Based Classes

3-Year Technology Projection Schedule

Year 1

<u>Qty.</u>	<u>Equipment Description</u>	<u>Cost</u>
12	Laptops for rolling cart	@\$600 each=\$7,200 + \$2,000 cart
1	Nintendo Wi Fit with accessories	\$500

Year 2

<u>Qty.</u>	<u>Equipment Description</u>	<u>Cost</u>
2	Laptops	\$1,200

Year 3

<u>Qty.</u>	<u>Equipment Description</u>	<u>Cost</u>
2	Laptops	\$1,200

Monitoring and Evaluation:

The Technology Committee is organized to continuously improve the integration of technology, in all its forms, for students, faculty, and staff and for overall organizational effectiveness. This focus will include the infusion of the Baldrige Education Criteria for Performance Excellence* in Education framework cited by the National Institute of Standards and Technology (NIST) under the U.S. Department of Commerce.

The Core Values and Concepts of this committee are embodied in seven categories as follows:

Leadership Strategic planning Student, stakeholder, and market focus Information and analysis Faculty and staff focus Process management Organizational performance results

*Phrases “Quest for Excellence” and “Performance Excellence” are trademarks and service marks of the National Institute of Standards and Technology.

Using the appropriate Baldrige Criteria for Performance Excellence in Education, our organization will benefit from conducting self-assessments and taking action for improvement. The committee can draw on the Criteria to guide the development of processes focused on performance excellence as well as self-assessment and action. Developing a “buy-in” mindset to self-assessment will allow us to do only the things needed to be done. Purpose of Self-Assessment: Regularly scheduled self-assessment and action are key to ongoing improvement. By improving the self-assessment and action process, this organization can reduce cycle time, gather more useful information, improve action and strategic plans, and achieve better results in student learning.*

* Based on “A Guide to Self-Assessment and Action”, Baldrige Criteria for Performance Excellence

<http://www.baldrige.nist.gov/Criteria.htm>

For the most recent CTI Evaluation date please refer to **Appendix B**.

Dutchess County BOCES Technology Plan Evaluation

In order to evaluate the effectiveness of the technology plan the following steps will provide a means to assist in measuring the extent to which the plan has met its original objectives and expected outcomes.

1. How and when will you evaluate the impact your technology plan implementation has on student performance?

a. Quarterly, the technology committee will meet to review the implementation of the plan, will solicit suggestions from administrators, faculty and support staff on improving the use of technology, new technology advances, and how to integrate those suggestions into the overall implementation plan.

b. Compile specific data usage on current software programs that enhance the teaching experience for teachers as well as students.

c. Solicit and collect student feedback on the use of computer workstations, software and use of the information superhighway that is enhancing their learning experiences.

2. Who will be responsible for collecting ongoing data to assess the effectiveness of the plan and its implementation?

a. On a monthly basis, the information will be collected by the technology committee, who will compile the data for review at the quarterly technology plan evaluation sessions.

b. This will provide windows of opportunity for reviewing the technology plan and involving all personnel affected by the use of technology.

3. How will accountability for implementation be assessed?

a. Monthly data collection, quarterly reviews, and on an annual basis, any proposed changes will be reviewed and sent forward for board approval.

b. A proposed annual report will be suggested as a means of maintaining the implementation timetable.

4. How will you use technology to evaluate teaching and learning?

a. A technology competency for teachers has been developed in this plan that will ensure that teachers can become aware of the learning standards and how technology can support the implementation of these standards. Six (6) standards will be used to evaluate teaching and learning, from the entry level to the mentor level using a teacher competency worksheet to track progress.

b. Technology Teacher Competency worksheets will be completed and reviewed quarterly.

5. How will you analyze implementation decisions to accommodate for changes because of new information and technologies?

a. Quarterly technology committee meetings will evaluate implementation decisions, and make appropriate suggestions for changes in new information or new technologies that are needed to fully integrate technology usage into learning standards.

Policies:

The Dutchess BOCES Acceptable Use Policy (AUP) can be found online at:

http://www.dcboces.org/sites/default/files/dcboces/acceptable_use_policy.pdf

Contents of this document include the following:

Acceptable Use Policy

[Use of Computers and Networked Information Systems]

[Internet Use]

Admin. Reg. No. 7161

October 29, 1997

Revised: July 11, 2001

General:

A user account issued pursuant to BOCES Policy and these Administrative Regulations may be suspended or revoked in the event of a breach of any of the provisions set forth below. A breach of the terms of the [BOCES Policy](#) and these Administrative Regulations may also result in disciplinary action against the user consistent with the [Student Code of Conduct](#), any applicable collective bargaining agreement, and State and Federal laws and regulations, and, where the breach is suspected to be illegal, referral to appropriate law enforcement officials.

Responsibility:

An individual user is not permitted to damage or tamper with computers, computer systems, networks, or other user's folders, work, or files. Due to the wide availability of services and information on the Internet, some of which may be potentially offensive to certain groups of users, the individual user must be responsible for his/her actions in navigating the network.

Privacy:

Although users may possess privacy rights with respect to their electronic mail transmissions, they acknowledge that the network administrator may periodically need to review on-line activities in the course of performing routine maintenance of the system. Users further acknowledge that if they are suspected of having violated this

policy or any other [BOCES Policy](#), rule and/or regulation, or any law, in any manner, the network administrator and/or appropriate school official may require access to their files to review on-line activities. The BOCES, and/or any of its agents and employees who review on-line activities of account holders suspected of having violated this policy, shall not be subject to any claims arising out of such review of on-line activities.

Security:

Security on any computer system is a high priority, especially when the network involves many users. Anyone identifying a security problem on the Internet must notify a network administrator.

Network Etiquette [Netiquette]:

Users are expected to abide by the generally accepted rules of network etiquette. These include, but are not limited to: being polite; not being abusive in messages to others; using appropriate language; not swearing or using vulgarities. Illegal activities are strictly forbidden.

Copyright:

Users must respect all copyright issues regarding software and attributions of authoring. The unauthorized copying or transfer of copyrighted materials may result in the suspension or revocation of a user's account.

Improper Use:

Users shall not post, send, transmit, publish, download, upload, copy, print or otherwise disseminate information containing any advertising or solicitation of other members to use goods and services that are not for school-related purposes. Users shall not use an account to conduct business or activity which is prohibited by law. The BOCES shall not be responsible for any financial obligation that may arise from a user's unauthorized use of the network/Internet.

Communicating:

When using the BOCES computers and networked information resources, all users should use language appropriate in the school context. Profanity, obscenity, vulgar or sexually offensive language is prohibited.

Acceptable Use Policy 02/02/2007 11:35 AM

http://www.dcboces.org/publications/acceptable_use.php Page 2 of 2

Communities Parents Students Teachers Administrators SYSOPs

in the school context. Profanity, obscenity, vulgar or sexually offensive language is prohibited.

Information on Other Systems on the Internet:

Some systems contain information that contains defamatory, abusive, obscene, profane, pornographic, age-inappropriate and otherwise offensive, threatening, inflammatory, hate-promoting, violence-promoting, anti-social, or illegal materials. The Dutchess BOCES does not condone or permit the use of such materials in the school environment. Users and parents/guardians of student users should be aware of the existence of such materials. Users

who bring such materials into the school environment may have their account suspended or terminated, may be subject to school disciplinary action, consistent with the [Student Code of Conduct](#), applicable collective bargaining agreement, and State and Federal laws and regulations and may be referred to appropriate law enforcement officials where such activities are suspected to be illegal.

Use of Network for Illegal Activities:

Users shall not tamper with, vandalize, read, modify, edit, delete or otherwise engage in unauthorized use of other users' files.

Safety:

Any user who receives harassing, threatening, or unwelcome communications should immediately bring them to the attention of the teacher or principal.

Due Process:

Any student user who is suspected of using the Internet in a manner that would violate this policy or any other [BOCES Policy](#), rule and/or regulation, or would violate any State or Federal law or regulation, will be notified of the alleged violation and provided with an opportunity to respond to and discuss the allegations. Any staff user who is suspected of using the Internet in a manner that would violate this policy or any other [BOCES Policy](#), rule and/or regulation, or would violate any State or Federal law or regulation, will be notified of the alleged violation and provided with an opportunity to respond to and discuss the allegation in a manner consistent with the applicable collective bargaining agreement.

Description of Content Filtering:

We utilize a centrally managed web content filter provided by M86 Security. This managed service is located at our local BOCES. The 8e6 Professional Edition delivers high-performance, enterprise-quality filtering via this optimized, task-specific appliance. It sits outside the flow of network traffic, executing passive observation and approval/denial of outbound Web requests. This "pass-by" methodology results in unmatched network compatibility, performance and fail-safe confidence. Anchored by; a broad and deep URL database organized into 100+ categories identifying millions of Web sites.

Appendix A:

Model Schools Workshops Spring 2010 Catalog

- **Introduction to using Moodle**

Jan 26, 2010; 8:30 a.m. – 3:30 p.m.

- **Free Resources for Media and Research Series: ProQuest**

Feb 9, 2010; 4:00 p.m. – 5:30 p.m.

- **Introduction to Google™ LitTrips**

Feb 18, 2010; 8:30 a.m. - 3:30 p.m.

- **Free Internet Resources to Support RTI Initiatives**

Feb 23, 2010; 3:00 p.m. - 4:30 p.m. or 5:00 p.m. – 6:30 p.m.

- **Internet Safety - ONLINE WEBINAR AND MOODLE COURSE**

Mar 2, 2010 - Mar 12, 2010; (2 hour webinar on March 2); 4 hours in Moodle

- **Compass: Supporting the Primary K-2 ELA Curriculum with CompassLearning Odyssey**

Mar 9, 2010; 8:30 a.m. - 11:30 a.m.

- **Compass: Extend ELA lessons with CompassLearning Odyssey Story Creator for Primary K-2 students**

Mar 9, 2010; 12:30 p.m. - 3:30 p.m.

- **Compass: Supporting the 3-8 ELA Curriculum with CompassLearning Odyssey**

Mar 10, 2010; 8:30 a.m. - 11:30 a.m.

- **Compass: CompassLearning Odyssey Writer for grades 3 – 8**

Mar 10, 2010; 12:30 p.m. - 3:30 p.m.

- **Free Resources for Media and Research Series: Gale**

Mar 15, 2010; 4:00 p.m. - 5:30 p.m.

- **Audio Recording in the Classroom**

Mar 16, 2010; 8:30 a.m. - 3:30 p.m.

- **Introduction to Photoshop**

Mar 23 & 25, 2010; 3:30 p.m. - 5:00 p.m.

- **Developing Lessons in SMART Notebook 10**

Apr 6, 2010; 3:00 p.m. - 6:00 p.m.

- **Moodle I**

April 6, April 13 & April 20, 2010; 3:30 p.m. - 5:30 p.m.

- **Google™ LitTrips Workgroup**

Apr 8, 2010; 3:30 p.m. - 4:30 p.m. OR 4:30 p.m. – 5:30 p.m.

- **Free Resources for Media and Research Series: Delicious**

Apr 15, 2010; 4:00 p.m. - 5:30 p.m.

- **Compass: Strategies that Work: CompassLearning Odyssey and the SMART Board**

Apr 20, 2010; 12:30 p.m. - 3:30 p.m.

- **Compass: Support K-8 Math instruction using CompassLearning Odyssey**

Apr 20, 2010; 8:30 a.m. - 11:30 a.m.

- **Free Resources for Media and Research Series: NoodleBib**

Apr 20, 2010; 4:00 p.m. - 5:30 p.m.

- **Developing Lessons in SMART Notebook 10**

Apr 27, 2010; 4:00 p.m. - 7:00 p.m.

- **Moodle II**

May 4, May 11, & May 18, 2010; 3:30 p.m. - 5:30 p.m.

- **Free Resources for Media and Research Series: Grolier**

May 20, 2010; 4:00 p.m. - 5:30 p.m.

Appendix B:

I. CTI Technology Survey Results:

Major Evaluation Addendum Survey Report 1:


Survey Statistics

Technology Survey initiated on June 6, 2008 – Sent to twelve (12) teachers involved in Technology Integration	
Viewed	34
Started	12
Completed	12
Completion Rate	100%
Drop Outs (After Starting)	0
<ul style="list-style-type: none"> • Average time taken to complete survey : 3 minute(s) 	

How did you, as a Career & Technical Education teacher meet the CDOS Standard 1:
"students will be knowledgeable about the world of work, explore career options, and related personal skills, aptitudes, and abilities to future career decisions?"

Frequency Analysis

	Answer	Count	Percent	20%	40%	60%	80%	100%
1.	1. Used New York Career Zone	1	11.11%					
2.	2. The ASVAB Career Exploration Program	3	33.33%					
3.	3. Career World Magazine Lesson Plans	0	0.00%					
4.	4. Student Paths, New York Edition	0	0.00%					
5.	5. Through Work-Based Learning Programs	4	44.44%					




6. Other	1	11.11%	
Total	9	100%	

Key Analytics

Mean	3.667	Key Facts <ul style="list-style-type: none"> • 77.78% chose the following options : <ul style="list-style-type: none"> ○ 5. Through Work-Based Learning Programs ○ 2. The ASVAB Career Exploration Program
Confidence Interval @ 95%	[2.444 - 4.889]	
	n = 9	
Standard Deviation	1.871	
Standard Error	0.624	

How did **Plato Pathways** initial Fastrack assessments assist you in improving your curriculum for your students?

Frequency Analysis

Answer	Count	Percent	20%	40%	60%	80%	100%
1. Plato Pathways was instrumental in helping my students improve in the math, and reading comprehension skills.	2	22.22%					
2. Plato Pathways did not help my students improve.	3	33.33%					
3. Plato Pathways was a waste of	0	0.00%					

5. Other	1	11.11%	
Total	9	100%	

Key Analytics

Mean	2.778	Key Facts <ul style="list-style-type: none"> • 66.67% chose the following options : <ul style="list-style-type: none"> ○ 2. Plato Pathways did not help my students improve. ○ 4. Plato Pathways development strategies should be reviewed for improvement.
Confidence Interval @ 95%	[1.810 - 3.746]	
	n = 9	
Standard Deviation	1.481	
Standard Error	0.494	

After receiving Plato Pathways Student Data, did you use the data to improve your curriculum?

Frequency Analysis

Answer	Count	Percent	20%	40%	60%	80%	100%
--------	-------	---------	-----	-----	-----	-----	------

Standard Deviation	1.165	changing my curriculum.
Standard Error	0.412	

How much of a percentage would you say (*referring to students*) were proficient in the use of online research tools for career planning?

Frequency Analysis

Answer	Count	Percent	20%	40%	60%	80%	100%
1. 1. 100% of my students	1	11.11%					
2. 2. 75% of my students	2	22.22%					
3. 3. 50% of my students	3	33.33%					
4. 4. Less than 50% of my students	2	22.22%					
5. Other	1	11.11%					
Total	9	100%					

Key Analytics

Mean	3.000	Key Facts <ul style="list-style-type: none"> 55.56% chose the following options : <ul style="list-style-type: none"> 3. 50% of my students 2. 75% of my students Least chosen option 11.11% : <ul style="list-style-type: none"> 1. 100% of my students
Confidence Interval @ 95%	[2.200 - 3.800]	
	n = 9	
Standard Deviation	1.225	
Standard Error	0.408	

What percentage of your students completed a career plan using *New York State CareerZone*? (or using whatever technology was available to them, for example moodle, other online sources or services)

Frequency Analysis

Answer	Count	Percent	20%	40%	60%	80%	100%
1. 1. 100%	0	0.00%					

	0	0.00%	
	2	25.00%	
an 50%	6	75.00%	
	0	0.00%	
	8	100%	

Analytics

	3.750	<p>Key Facts</p> <ul style="list-style-type: none"> • 100% chose the following options : <ul style="list-style-type: none"> ○ 4. Less than 50% ○ 3. 50%
val @ 95%	[3.429 - 4.071]	
	n = 8	
on	0.463	
	0.164	

technologies did you use to enhance student learning to improve basic skills that will students successful in the global workforce?

Analysis

	Count	Percent	20%	40%	60%	80%	100%
specific technology	2	22.22%					

Mean	4.556	Key Facts <ul style="list-style-type: none"> • 55.56% chose the following options : <ul style="list-style-type: none"> ○ Other ○ 1. No specific technology
Confidence Interval @ 95%	[2.855 - 6.256]	
	n = 9	
Standard Deviation	2.603	
Standard Error	0.868	

If you had students who completed aptitude testing through the **ASVAB Career Exploration Program**, did you use their test results to improve your curriculum or improve their basic skills?

Frequency Analysis

Answer	Count	Percent	20%	40%	60%	80%	100%
1. 1. Yes, I used their scores to improve my curriculum.	0	0.00%					
2. 2. No, I did not use that data.	4	50.00%					
3. 3. The data does not correlate to curriculum improvement.	2	25.00%					
4. 4. The data is for aptitude testing only.	1	12.50%					
5. Other	1	12.50%					
Total	8	100%					

Key Analytics

Mean	2.875	Key Facts <ul style="list-style-type: none"> • 75% chose the following options : <ul style="list-style-type: none"> ○ 2. No, I did not use that data. ○ 3. The data does not correlate to curriculum improvement.
Confidence Interval @ 95%	[2.095 - 3.655]	
	n = 8	
Standard Deviation	1.126	
Standard Error	0.398	

Do you currently know how to use Moodle software to develop online content?

Frequency Analysis

	Count	Percent	20%	40%	60%	80%	100%
	4	44.44%					
	4	44.44%					
was taught.	1	11.11%					
eed to.	0	0.00%					
	0	0.00%					
	9	100%					

Analytics

	1.667	Key Facts <ul style="list-style-type: none"> • 88.89% chose the following options : <ul style="list-style-type: none"> ○ 1. Yes. ○ 2. No.
val @ 95%	[1.205 - 2.129]	
	n = 9	
ion	0.707	
	0.236	

urrently maintain an online website for your students through the Dutchess County
bsite?

Analysis

	Count	Percent	20%	40%	60%	80%	100%
	4	44.44%					

Mean	1.667	Key Facts <ul style="list-style-type: none"> • 88.89% chose the following options : <ul style="list-style-type: none"> ○ 1. Yes. ○ 2. No.
Confidence Interval @ 95%	[1.205 - 2.129]	
	n = 9	
Standard Deviation	0.707	
Standard Error	0.236	

Do you have a blog site or a wiki that you use to deliver content to your students through the Dutchess County Boces website/services?

Frequency Analysis

Answer	Count	Percent	20%	40%	60%	80%	100%
1. 1. Yes.	2	22.22%					
2. 2. No.	6	66.67%					
3. 3. Dont know how to do that.	1	11.11%					
4. Other	0	0.00%					
Total	9	100%					

Key Analytics

Mean	1.889	Key Facts <ul style="list-style-type: none"> • 88.89% chose the following options : <ul style="list-style-type: none"> ○ 2. No. ○ 1. Yes.
Confidence Interval @ 95%	[1.496 - 2.281]	
	n = 9	
Standard Deviation	0.601	
Standard Error	0.200	

Major Evaluation Addendum Survey Report 2:

ics

Viewed	35
Started	12
Completed	12
Completion Rate	100%
Drop Outs (After Starting)	0
<ul style="list-style-type: none"> Average time taken to complete survey : 3 minute(s) 	

How did you, as a Career & Technical Education teacher meet the CDOS Standard 1: "students will be knowledgeable about the world of work, explore career options, and related personal skills, aptitudes, and abilities for future career decisions?"

Frequency Analysis

	Answer	Count	Percent	20%	40%	60%	80%	100%
1.	1. Used New York Career Zone	1	11.11%					
2.	2. The ASVAB Career Exploration Program	3	33.33%					
3.	3. Career World	0	0.00%					

Key Analytics

Mean	3.667	Key Facts <ul style="list-style-type: none"> • 77.78% chose the following options : <ul style="list-style-type: none"> ○ 5. Through Work-Based Learning Programs ○ 2. The ASVAB Career Exploration Program
Confidence Interval @ 95%	[2.444 - 4.889]	
Standard Deviation	1.871	
Standard Error	0.624	

How did **Plato Pathways** initial Fastrack assessments assist you in improving your curriculum for your students?

Frequency Analysis

Answer	Count	Percent	20%	40%	60%	80%	100%
1. Plato Pathways was							



Mean	2.778	Key Facts <ul style="list-style-type: none"> • 66.67% chose the following options : <ul style="list-style-type: none"> ○ 2. Plato Pathways did not help my students improve. ○ 4. Plato Pathways development strategies should be reviewed for improvement.
Confidence Interval @ 95%	[1.810 - 3.746]	
	n = 9	
Standard Deviation	1.481	
Standard Error	0.494	

After receiving Plato Pathways Student Data, did you use the data to improve your curriculum?

	n = 8	<input type="radio"/> 2. No. <input type="radio"/> 4. The data was not enough to make an impact on changing my curriculum.
Standard Deviation	1.165	
Standard Error	0.412	

How much of a percentage would you say (*referring to students*) were proficient in the use of online research tools for career planning?

Frequency Analysis

Answer	Count	Percent	20%	40%	60%	80%	100%
1. 1. 100% of my students	1	11.11%					
2. 2. 75% of my students	2	22.22%					

Confidence Interval @ 95%	[2.200 - 3.800] n = 9	<ul style="list-style-type: none"> • 55.56% chose the following options : <ul style="list-style-type: none"> ○ 3. 50% of my students ○ 2. 75% of my students • Least chosen option 11.11% : <ul style="list-style-type: none"> ○ 1. 100% of my students
Standard Deviation	1.225	
Standard Error	0.408	

What percentage of your students completed a career plan using **New York State CareerZone**? (or using whatever technology was available to them, for example moodle, other online sources or services)

Frequency Analysis

	Answer	Count	Percent	20%	40%	60%	80%	100%
1.	1. 100%	0	0.00%					
2.	2. 75%	0	0.00%					
3.	3. 50%	2	25.00%					
4.	4. Less than 50%	6	75.00%					
5.	Other	0	0.00%					
	Total	8	100%					

Key Analytics

Mean	3.750	<p>Key Facts</p> <ul style="list-style-type: none"> • 100% chose the following options : <ul style="list-style-type: none"> ○ 4. Less than 50% ○ 3. 50%
Confidence Interval @ 95%	[3.429 - 4.071] n = 8	
Standard Deviation	0.463	
Standard Error	0.164	

gies did you use to enhance student learning to improve basic
make our students successful in the global workforce?

alysis

	Count	Percent	20%	40%	60%	80%	100%
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1.	1. No specific technology	2	22.22%	
2.	2. Smart Board technologies	1	11.11%	
3.	3. Smart Notebook technologies	0	0.00%	
4.	4. Locally developed web sites	1	11.11%	
5.	5. Locally developed blog sites	0	0.00%	
6.	6. Moodle	2	22.22%	
7.	Other	3	33.33%	
	Total	9	100%	





Key Analytics

Mean	4.556	<p>Key Facts</p> <ul style="list-style-type: none"> • 55.56% chose the following options : <ul style="list-style-type: none"> ○ Other ○ 1. No specific technology
Confidence Interval @ 95%	[2.855 - 6.256]	
	n = 9	
Standard Deviation	2.603	
Standard Error	0.868	

ents who completed aptitude testing through the **ASVAB Career**
ogram, did you use their test results to improve your
improve their basic skills?

alysis

	Count	Percent	20%	40%	60%	80%	100%
ised their improve my n.	0	0.00%					



2.	2. No, I did not use that data.	4	50.00%	
3.	3. The data does not correlate to curriculum improvement.	2	25.00%	
4.	4. The data is for aptitude testing only.	1	12.50%	
5.	Other	1	12.50%	
Total		8	100%	

Key Analytics

Mean	2.875	<p>Key Facts</p> <ul style="list-style-type: none"> • 75% chose the following options : <ul style="list-style-type: none"> ○ 2. No, I did not use that data. ○ 3. The data does not correlate to curriculum improvement.
Confidence Interval @ 95%	[2.095 - 3.655]	
	n = 8	
Standard Deviation	1.126	
Standard Error	0.398	

o you currently know how to use Moodle software to develop online content?

Frequency Analysis

Answer	Count	Percent	20%	40%	60%	80%	100%
1. 1. Yes.	4	44.44%					
2. 2. No.	4	44.44%					

Confidence Interval @ 95%	[1.205 - 2.129] n = 9	<ul style="list-style-type: none"> • 88.89% chose the following options : <ul style="list-style-type: none"> ○ 1. Yes. ○ 2. No.
Standard Deviation	0.707	
Standard Error	0.236	

Do you currently maintain an online website for your students through the Dutchess County Boces website?

Frequency Analysis

Answer	Count	Percent	20%	40%	60%	80%	100%
1. 1. Yes.	4	44.44%					
2. 2. No.	4	44.44%					
3. 3. Dont know how to do that.	1	11.11%					
4. 4. Was never told these services were available.	0	0.00%					
5. Other	0	0.00%					
Total	9	100%					




Key Analytics

Mean	1.667	<p>Key Facts</p> <ul style="list-style-type: none"> • 88.89% chose the following options : <ul style="list-style-type: none"> ○ 1. Yes. ○ 2. No.
Confidence Interval @ 95%	[1.205 - 2.129] n = 9	
Standard Deviation	0.707	
Standard Error	0.236	

blog site or a wiki that you use to deliver content to your h the Dutchess County Boces website/services?

alysis

Count	Percent	20%	40%	60%	80%	100%
2	22.22%					

2.	2. No.	6	66.67%	
3.	3. Dont know how to do that.	1	11.11%	
4.	Other	0	0.00%	
	Total	9	100%	

Key Analytics

Mean	1.889	<p>Key Facts</p> <ul style="list-style-type: none"> • 88.89% chose the following options : <ul style="list-style-type: none"> ○ 2. No. ○ 1. Yes.
Confidence Interval @ 95%	[1.496 - 2.281]	
	n = 9	
Standard Deviation	0.601	
Standard Error	0.200	