

MILLBROOK TECHNOLOGY VISION



Learning for the Digital Age



A SEQUENTIAL TIMELINE OF TECHNOLOGY INTEGRATION

Using technology to enhance student performance with streamlined Mac tools for a rich learning experience K-12.

MCSD TECHNOLOGY TEAM

Preparing Our Students For Their Future

We are sharing with you endless opportunities. Creative ways to think about instruction. Innovative methods to foster critical thinking.

We are proposing a content creation method to challenge students, engage students, and intrinsically motivate students to be better and probe deeper.

Our comprehensive implementation program, allows for 100% student access---starting in grades K-6 & 10 for the 2011-2012 school year.



Elementary School Technology

New Learning With Cutting Edge Software



Technology
Operations and
Concepts

Elm Drive Elementary

- **I Paint** - create original work
- **I Photo** - take photos, add captions, create album in sequence
- **Numbers** - tallying and graphing
- **iMovie** - create class movies
- **Skype** - whole class sessions
- **PhotoBooth** - create and manipulate video
- **Keynote** - use basic animation & create class presentation
- **Stkyz** - use stop frame animation
- **Podcast** - create individual podcast
- **GarageBand** - record sound and music

K-5 Benchmark Projects

Students will complete benchmark projects in each grade level to demonstrate the acquisition of essential technology skills.



Alden Place Elementary

- **iMovie** - create original movie with sound, create self documentary
- **Podcasting** - to present content
- **iWeb** - create webpage
- **iCal** - create individual, interactive schedule
- **iCalculator** - solve and show simple algebraic expressions
- **Numbers** - create data based on various math problems
- **Keynote** - create independent and collaborative presentations that incorporate video, images, sound and links
- **Photo Booth** - present content
- **Skype** - independently with students in a different school
- **Pages** - edit work using sticky notes and making adjustments with virtual feedback
- **iPhoto** - manipulate digital photos
- **GarageBand** - use loops to create original music
- **LegoDesigner** - create buildings and 3-D designs

Middle School Technology

Creative Thinking and Innovation



Digital
Citizenship

Essential Software

KeyNote

- Create multi-media presentations to persuade or inform
- Display and support research, opinions, and knowledge

iMovie

- Create commercials, movie trailers, public service announcements
- Develop fully animated motion pictures with audio

iWeb

- Develop websites, blogs, and internet posts
- Publish, edit, and comment on the web

iTunes

- Share various media files post to and download from University Program

Photoshop

- Edit, combine, and manipulate digital images
- Import images to create presentations
- Create digital documents with images and text

Garageband

- Learn and write sheet music
- Compose and edit music for movie creation
- Record music with physical instruments

Illustrator

- Create custom digital illustrations for commercial art
- Develop images to enhance academic projects
- Produce media that can be animated and reproduced

InDesign

- Create media layouts for print designs
- Produce brochure, manuals, magazine spreads, newspapers

Flash

- Animate static images
- Create interactive diagrams

Vox Machina

- Create MP3s from text
- Electronically read text from web or files
- Save and transfer to other devices

Cumulative Digital Portfolio

At the completion of 8th grade students will demonstrate progression of technological understanding by completing a portfolio project containing work from various classes.

Middle School Technology

Creative Thinking and Innovation



Potential Classroom Projects Integrating Mac Technology

Social Studies- Technology Intergraded Course

- iMovie/Flash: Create Interactive Museum
- iFlash: create and use flash cards for studying
- iMovie/Keynote/Audacity: Develop UN & Nuclear Weapon Anti-Proliferation campaigns
- iWeb: Create Webpage for UN region
- Illustrator: Create Propaganda Posters
- iMovie/GarageBand: Create 1920's reenactment skits (black & white with film grain and music)
- Flash/Photoshop: Create Interactive Maps to show the spread of Ideologies in Europe by year /country/ etc.
- GarageBand: Produce anti-war songs -1960's/1970's write own lyrics that can be analyzed for meaning in English class ---poems / lyrics
- Keynote/Illustrator: Create Iconic Newspaper Covers based on Washington Trip
- iEarn- Debunking Local Stereotype and Sharing within Global Community (Podcast, Movie on web, Public service; compare to others around the globe)
- Keynote/Pages: "This I Believe" Project: Thesis Development/Create A Statement You Believe In and Prove It
- Pages: Create own DBQs
- iMovie/Claymation: Ken Burns style documentaries based on Native Americans
- InDesign/Pages/Photoshop: Newspaper Projects about Sectionalism
- Podcasts: current events
- Illustrator: produce scrap books from D.C. Trip as a digital document
- Pages/inDesign: create travel brochure

Art & Computer Applications

- iWeb, iDvd: Digital Portfolio
- Photoshop: Digital Painting, Manipulate Photography, Self Portrait, Illustrate a song lyric, Photo manipulation/ retouching, CD cover/booklet, Panoramas, Digital Collage, Advertising/Poster design
- Illustrator: Expressive Typography, Children's Book Cover/book plate, product design, Logos, Brand Identity, Magazine spread, Newspaper, Typographic Portrait, Elements & Principals of Design
- iMovie: Claymation Collaboration with Art & Technology, Mocumentary / Documentary, Music video of movie clips, Personal music video using Garage Band music, Illustration animation with flash
- Pages/ iMovie: Interactive Critique of each other's artwork

Middle School Technology

Creative Thinking and Innovation



Potential Classroom Projects Integrating Mac Technology

Science

- Photoshop/Illustrator: Map your favorite vacations: 6th grade science & SS
- Flash: Scientific Method Moving Billboards
- iMovie: Cell City project
- Flash: Bodies exhibit 7th grade Science
- GarageBand/iMovie: Music Videos for Scientific Elements
- iMovie/Flash: Re-create Inventions Project
- Flash: Modern marvels documentary of the physics of roller coasters

Math

- iMovie: Model the “count” videos from Sesame Street. for expressions

- Numbers/Photoshop: Produce graphical representations of statistical purchases of sports budgets, government budgets, school budgets etc (animated pie charts)
- Numbers/Photoshop: Polling (sets, sample size & sample quality)
- Illustrator: create posters for different algebraic formulas
- Numbers/Photoshop: Stock Market project
- Smart notebook: build sudoku and other mathematical puzzles

Foreign Language

- KeyNote/Garage band/iMovie: Produce their own rosetta stone lessons of verbs,

masculinity.

- Skype: international
- iMovie: Create Foreign Language Fashion show

Family & Consumer Science

- iMovie/Pages: prepare and analyze job interviews
- Flash: create life road map
- iMovie: create cooking video
- Illustrator: design and illustrate cook book

Physical Education

- Numbers/Photoshop: Chart and record fitness goals and bench marks
- Numbers/Illustrator: Produce graphical representations of heart rate, physical fitness

High School Technology



Critical Thinking and Decision Making

Collaboration and Independent Problem Solving

Essential Software and Projects

New Programs

Wordpress/BuddyPress

- Private social network
- Students can create as many blogs as they want in an easy way
- Wikis for document collaboration
- Forums for asynchronous threads on topics
- Private messaging and chat for live discussions
- E-commerce sites to sell products

Premiere

- Advanced video editing with effects, timeline, layers and manipulations

Flash Catalyst

- Brings artwork to life with new interactivity

New Projects

Redesign American Cultural Icons

- Photoshop to visually depict American culture

- Wordpress to post work, post comments

Student Created iLife Lessons for K-5

- Quicktime video tutorials- quicktime
- Screen shots for picture tutorials cmd + shift 4 (built into the mac)
- Wordpress to post work

Course Collaborations

- Computer Applications & Content /Elective Area Courses
- Square app with iphone/ipad for transaction
- Quickbooks will maintain the charting of business growth
- Photoshop to convert illustrations to use with silkscreens
- Illustrator and Photoshop to make new designs
- Wordpress for creating websites and for tracking visits to site
- Flash Catalyst, Flash Pro for online advertising

- Pages for crunching data
- Illustrator for better visual aids (info-graphics) for business analysis
- Wordpress for e-commerce

Corona SDK for App Creation (Apple, Android and Kindle)

- Student created learning apps for K-8

Premiere

- Commercial for original innovative product

After Effects:

- Advanced video effects and animation

Final Cut Express:

- Edit and manipulate student videos and footage
- Collaboration and independent problem solving

High School Technology

Collaboration and Independent Problem Solving



Essential Software and Projects

Self Directed Learning Projects - Technology Integrated Classrooms

Students create an online environment based on independent study

- Wiki- document collaboration
- Forums- create new threads and respond to topics and other threads
- Blogs- journal of all learning and posting of original work (video, images, descriptions, widgets)
- Chat- live discussion on topics
- Website creation- interactive content on any topic for any subject

Digital Portfolio-Senior Culminating Experience

- Senior defined project based on area of interest
- Sophisticated multimedia experience

Specialized Learning/Elective Courses

Professional App Design (in depth programming)

- Create advanced games and learning modules to be sold on various app markets

Web site for database driven websites (coding)

- Custom themes and sold on theme marketplaces

Video Game Creation

- Corona SDK: Lua
- Objective C: native Mac Language

Advanced Graphic Design (interaction design)

- Open Frameworks: C++

Design Your Own Freelance company

- Create projects for real clients in Millbrook and beyond