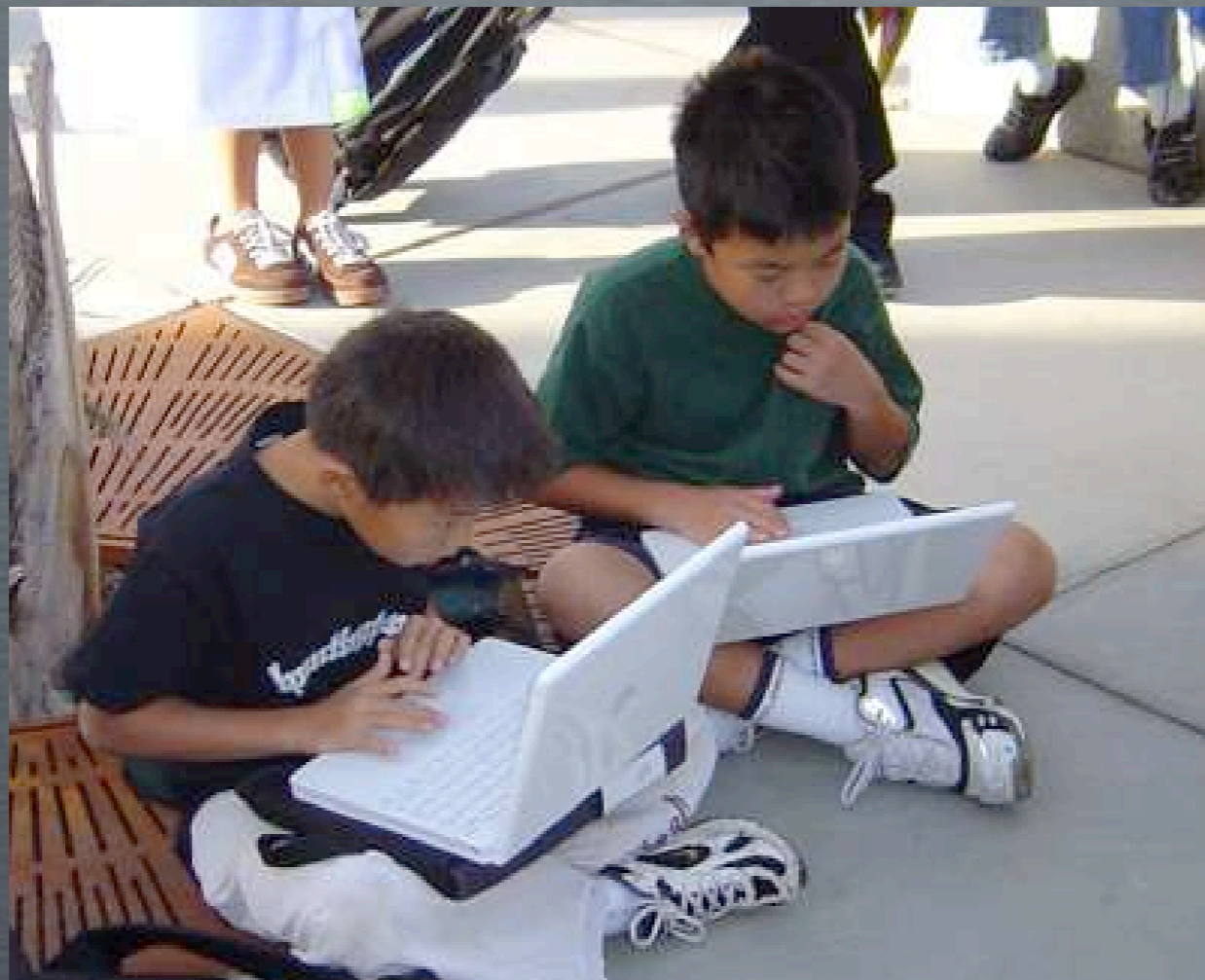


# 1:1 LAPTOP PROGRAM

FULLERTON SCHOOL  
DISTRICT



# PRESENTERS

- ☀ Tony Anderson
  - ☀ Director, Information Services
  - ☀ Fullerton School District
  - ☀ [tony\\_anderson@fsd.k12.ca.us](mailto:tony_anderson@fsd.k12.ca.us)
  
- ☀ Judy Lieb, Ed.D.
  - ☀ Coordinator, Educational Technology and Media Services
  - ☀ Fullerton School District
  - ☀ [judy\\_lieb@fsd.k12.ca.us](mailto:judy_lieb@fsd.k12.ca.us)

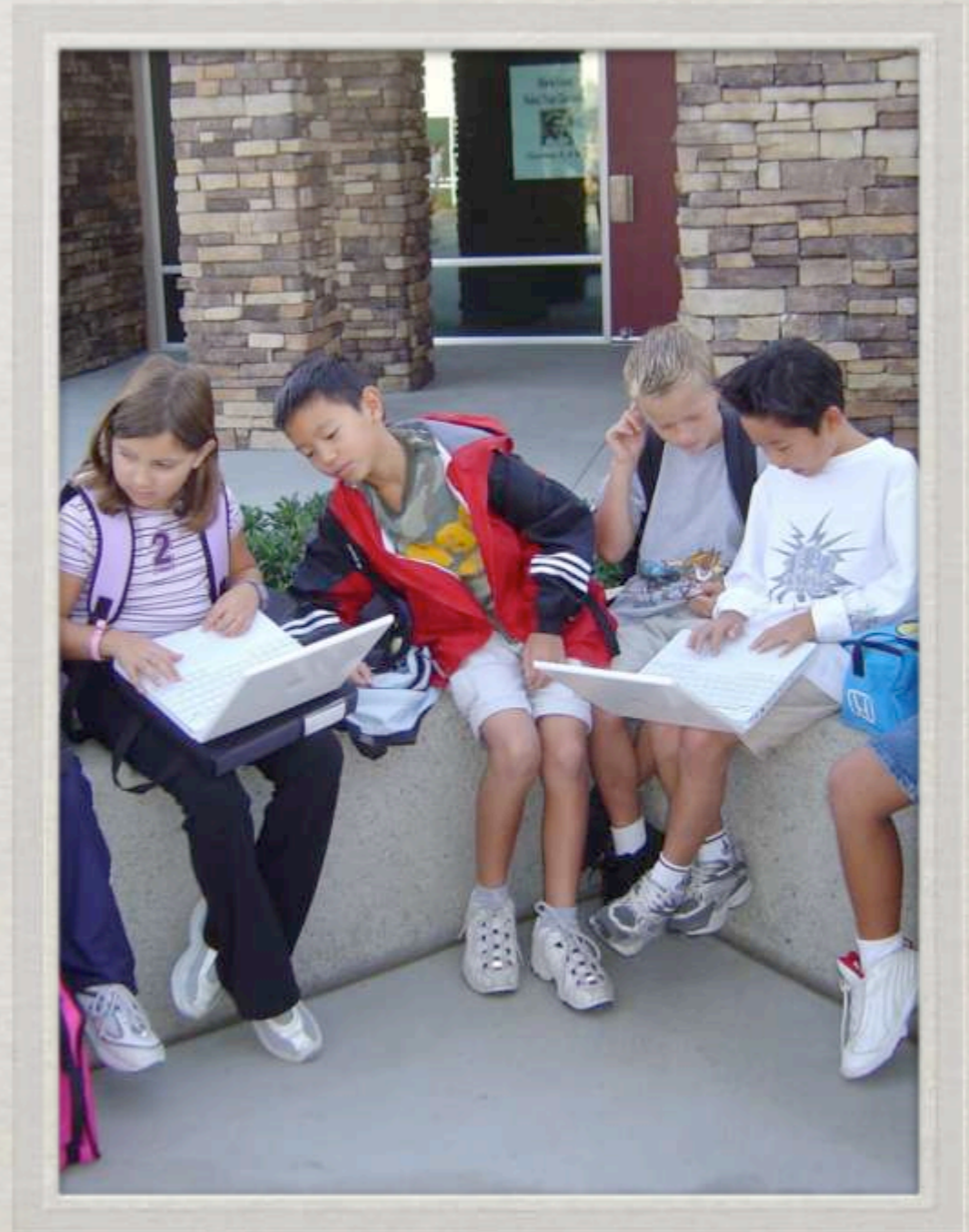
# CURRENT HANDOUT

☀ Available at:

☀ [http://www.fsd.k12.ca.us/menus/1to1/presos/cue\\_2005.pdf](http://www.fsd.k12.ca.us/menus/1to1/presos/cue_2005.pdf)

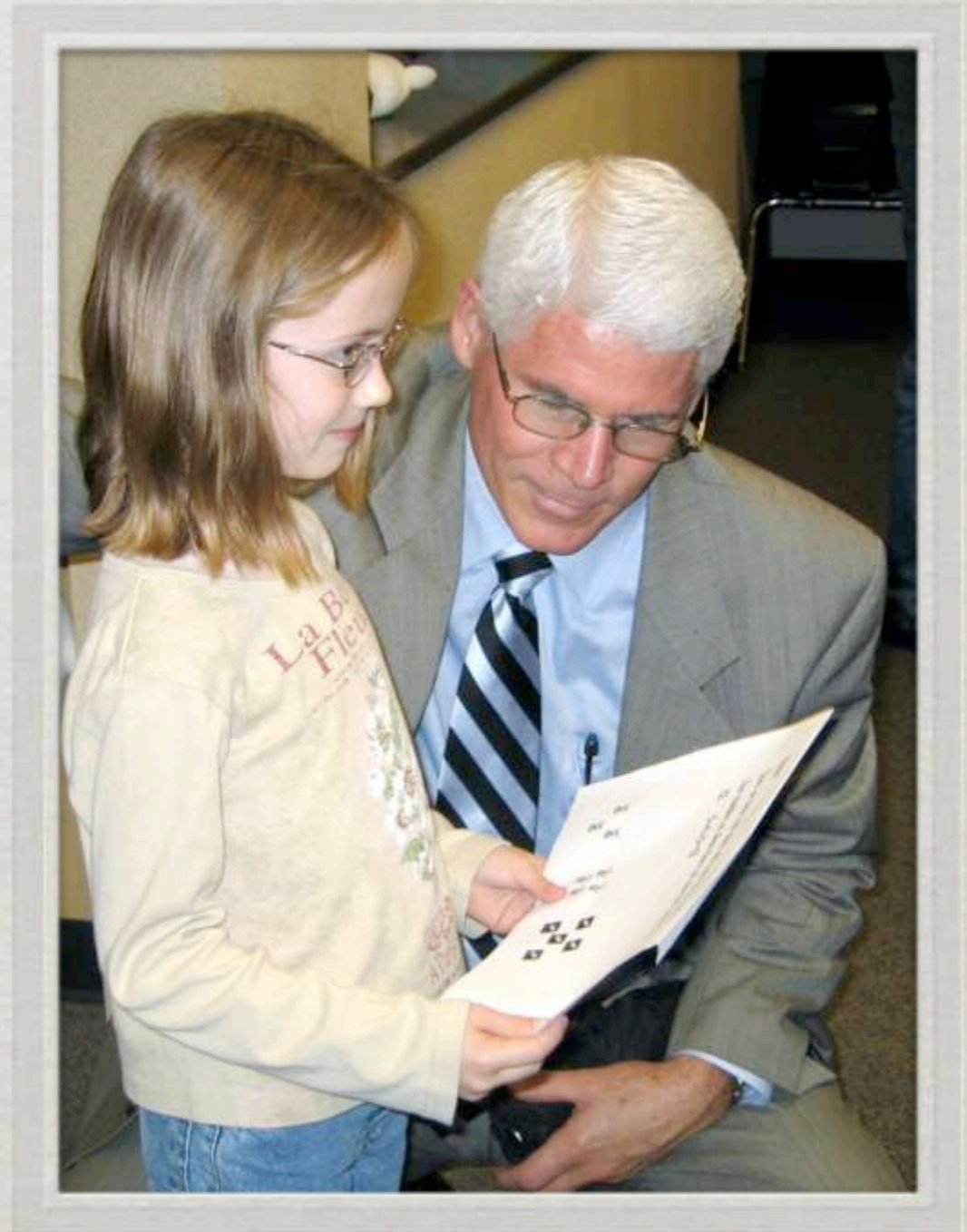
# SCOPE OF PROGRAM

- ☼ Fisler School
  - ☼ Grade 3-7
  - ☼ 395 students
- ☼ Nicolas Junior High School
  - ☼ Grade 7
  - ☼ 554 students
- ☼ Hermosa Drive Elementary School
  - ☼ Grades 3-6 GATE
  - ☼ 63 students



# VISION

- ❁ Superintendent visits  
Henrico County Schools  
(October 2003)
- ❁ Implement program across  
demographic lines
- ❁ Pilot 1:1 with different  
funding models
- ❁ 24/7 laptop use



# WHY DO 1:1?

- ✿ Achievement scores improved
- ✿ Absence rates declined
- ✿ Collaborative, project-focused group work increased
- ✿ Development of 21st century skills
  - ✿ Independent learning
  - ✿ Peer collaboration
  - ✿ Skilled communication

# FLORIDA REPORT

- ☼ Review of 1:1 literature
- ☼ 99 page review
- ☼ Download as PDF
- ☼ Laptops for Learning – <http://etc.usf.edu/L4L/>



## Laptops for Learning

**Final Report and Recommendations of the Laptops for Learning Task Force**

March 22, 2004

Tina Barrios, Ph.D.	Chair, Laptops for Learning Task Force Supervisor of Instructional Technology, Manatee County
Judy Ambler Allen Anderson	Supervisor of Instructional Technology, Pinellas County Technology Resource Teacher, Cunningham Creek Elementary, St. Johns County
Paula Barton Sharon Burnette	School Superintendent, Baker County Teacher in Residence in the Executive Office of the Governor, Duval County
Carine Feyten, Ph.D. Jeff Gallup Elisha Gonzalez- Bonnewitz	Associate Dean, College of Education, University of South Florida Math teacher, Liberty Middle School, Orange County Assistant Principal, (K-8) Arbor Ridge School, Orange County
J. Christine Harmes, Ph.D.	Research Consultant, University of South Florida
Don Manderson	Director of Instructional Technology, Escambia County

# STATE OF MAINE

☀ Grades 7-8 — 34,000 laptops

☀ Began 2002

☀ <http://www.state.me.us/mlte/>

Maine.gov Agencies | Online Services | Web Policies | Help

## Maine Learning Technology Initiative

- Advisory Board
- About MLTI
- Resources
- Timeline
- Fundraising
- Press
- Contact Us

**SCHOOL CORNER**

- portals
- meetings/events
- mainelearns.org

The Maine Learning Technology Initiative (MLTI) is the largest e... Maine and perhaps the world. Maine stands as the first state to... by providing a laptop to each and every 7th and 8th grade stude...

**Vision:** The vision behind MLTI is very simple: to provide the top... students become the most technologically savvy students in the... state level to an economy and society that focuses more on kno... and manpower, it is imperative that a major part of all students'...

**Much more than a Technology Project:** The Maine Learning T... transforming teaching and learning as we know it by providing th... school students and teachers across the state with portable con... access to computers in schools will no longer focus on improving... place teachers and students will have one-to-one access making... and the learner. Wireless access to the internet will allow studer... available through conventional methods. In addition, curriculum... technology so that both teachers and students will excel in a wo...

**World Wide Exposure:** MLTI has gained the interest of many s... closely. Please refer to the press link for more. "I'm here to repo... technology project in the history of the world, here in the state o...

- State of Maine Homepage
- Apple Links of Interest

Department of Education | Priva

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# COBB COUNTY, GA

☀ 63,000 iBooks

☀ Phase I—Teachers and Four Demo Sites

☀ Phase II—High School Students

☀ Phase III—Middle School Students

The screenshot shows the 'Power to Learn' website for Cobb County School District. The header includes the Cobb County logo and the 'POWER to LEARN' logo. Navigation links include 'WHAT IS P2L?', 'FACTS AND FIGURES', 'TIMELINE', 'ABOUT APPLE', 'F.A.Q.', and 'INTERACT'. The main content area features a headline 'Now there's an i in Learn.' followed by a paragraph about Cobb students using iBooks. A photograph of an Apple iBook G4 laptop is shown on the right. Below the photo, there is a section titled 'Power in numbers.' which details the program's cost and benefits. A bulleted list of program features is provided, including a four-year warranty, 24/7 help desk, local repairs, and training. At the bottom, there is a section for 'Success Stories for 1:1 Initiatives' with a sub-section for 'Maine' listing statistics on student and teacher satisfaction.

**Now there's an i in Learn.**

Cobb students will get to open their i's with Power to Learn. iBooks, that is.

Each student will be issued an **Apple iBook G4**, one of the most powerful and sleek notebook computers on the market. Each will come fully-loaded with Mac OS X, Microsoft Office, wireless Internet connection and iLife, Apple's music, photo, & movie suite. It's the most powerful learning tool they've ever laid eyes on.

Find out more information on Apple, the iBook, and more [in our 'About Apple' section.](#)

**Power in numbers.**

The Cobb County School District is the largest school district to ever engage in a one-to-one computer initiative, and allows Apple to provide the hardware, software, and support at the best possible value. The price of each iBook, based on a four-year lease, is \$271.26 per year, less than the cost per computer in Maine & Michigan's programs. Add in comprehensive training and local support, and the cost per student is only **\$350 annually.**

- Each iBook has a full **four-year warranty.**
- Help will always be available, through our 24/7/365 dedicated help desk.
- Repairs and service will be made at a local repair depot.
- Additional batteries will be provided for each device.
- The package includes a strong ongoing training program for teachers, staff, parents, students and tech leaders, including a dedicated center focused on leadership, learning, coaching and coordination of best practices for teachers within the district, and two dedicated staff-development specialists provided by Apple. (In addition, Apple will provide two staff development specialists. These trainers will help move teachers up the learning curve over the course of the program, from basic usage skills to advanced classroom integration at the individual teacher's pace.)
- Apple will provide a total of seven support personnel.
- You can find a copy of the RFP sent to vendors [here.](#)

**E-efficient use of your dollars.**

Power to Learn is made possible through the Special Purpose Local Option Sales Tax (SPLOST), approved by Cobb County voters in 2003. The program will be **rolled out in phases,**

**Success Stories for 1:1 Initiatives**

**Maine**

- 36,000 7th and 8th graders using iBooks statewide
- 82.7% of students said the iBooks improved their school work (Maine Education Policy Research Inst.)
- 51% of teachers said the iBooks helped them develop

# HENRICO COUNTY SCHOOLS

- ☀ Richmond, VA
- ☀ Grades 6-12 — 23,000 laptops
- ☀ Began 2001
- ☀ Survey: 8 out of 10 support continuing program
- ☀ <http://www.henrico.k12.va.us/iBook/>



The screenshot shows the Henrico County Public Schools (HCPS) website. At the top is a banner with the HCPS logo and contact information: P.O. Box 23120, Richmond, Virginia 23218, (804) 652-3600. Below the banner is a navigation menu with links for Superintendent, School Board, Administration, iBook Teaching Initiative, Schools, Human Resources, Parent Links, and Search. The main content area is titled "Teaching & Learning Initiative". It includes a link for a printable version in Microsoft Word Format and PDF. There is a "Related Topics" sidebar with links to Acceptable Use Policy (Adobe PDF), Code of Conduct, iBook Computer Regulations, iBook Specifications (Adobe PDF), Insurance (Adobe PDF), Internet Access, K-12 Planet, Teacher Technology Newsletter, and What Every Parent Needs to Know About Internet Safety. The main text discusses the initiative's goal to close the digital divide and lists general facts about the program, including the number of laptops deployed and the types of hardware and software provided.

**Teaching & Learning Initiative**

**Click here for a printable version:**  
[Microsoft Word Format](#)  
[PDF](#)

**Related Topics**  
[Acceptable Use Policy \(Adobe PDF\)](#)  
[Code of Conduct](#)  
[iBook Computer Regulations](#)  
[iBook Specifications \(Adobe PDF\)](#)  
[Insurance \(Adobe PDF\)](#)  
[Internet Access](#)  
[K-12 Planet](#)  
[Teacher Technology Newsletter](#)  
[What Every Parent Needs to Know About Internet Safety](#)

**Teaching & Learning Initiative**

Today's students live in a digital world and come to school with different expectations and needs. Through the Teaching and Learning Initiative, Henrico's schools are preparing students for the 21st century, closing the digital divide while providing meaningful instruction and improving academic performance. The Henrico County school system takes seriously the responsibility of providing students with a quality education and teaching them state-of-the-art technology skills to prepare them for college and the workplace.

**General Facts**

- The Henrico County Public School system has teamed with Apple Computers and launched the Teaching and Learning Initiative by deploying Apple iBook laptops to all high school and middle school students and staff. The school system's vision is to close the digital divide by providing computers and Internet access to all students. Henrico's goal is to demonstrate a new paradigm for teaching and learning that is suitable for 21st century America.
- Henrico County Public Schools contracted with a local service provider to offer low-cost Internet access for students and teachers who do not have access in their homes.
- Henrico deployed approximately 24,000 Apple iBooks to all sixth-through 12th-grade students.
- Henrico deployed approximately 3,300 Apple iBooks to its entire teaching and administrative staff.
- Each elementary classroom has 5 iMacs for a total of 4,500 iMacs system-wide.
- Each high school has at least two PC labs offering student access to approximately 1,200 PC computers.
- Laptop batteries are programmed to last four-six hours per day. Students need to charge their laptop at home each night, but there are stations throughout the school where students can re-charge their batteries during the day.
- The laptop issued to students offers the following:
  - Hardware:
    - Macintosh operating system X.2.6
    - 500-800 Mhz PowerPC G3
    - 320 mega bytes of memory
    - Wireless and Ethernet cards
  - Software:
    - Internet access
    - Word Processor
    - Spreadsheet
    - Database

# HENRICO VISIT

- ✻ April 2004
- ✻ Principals from Fisler and Nicolas
- ✻ President of Board of Trustees
- ✻ Director, Information Services

# IMPORTANT HENRICO LESSONS

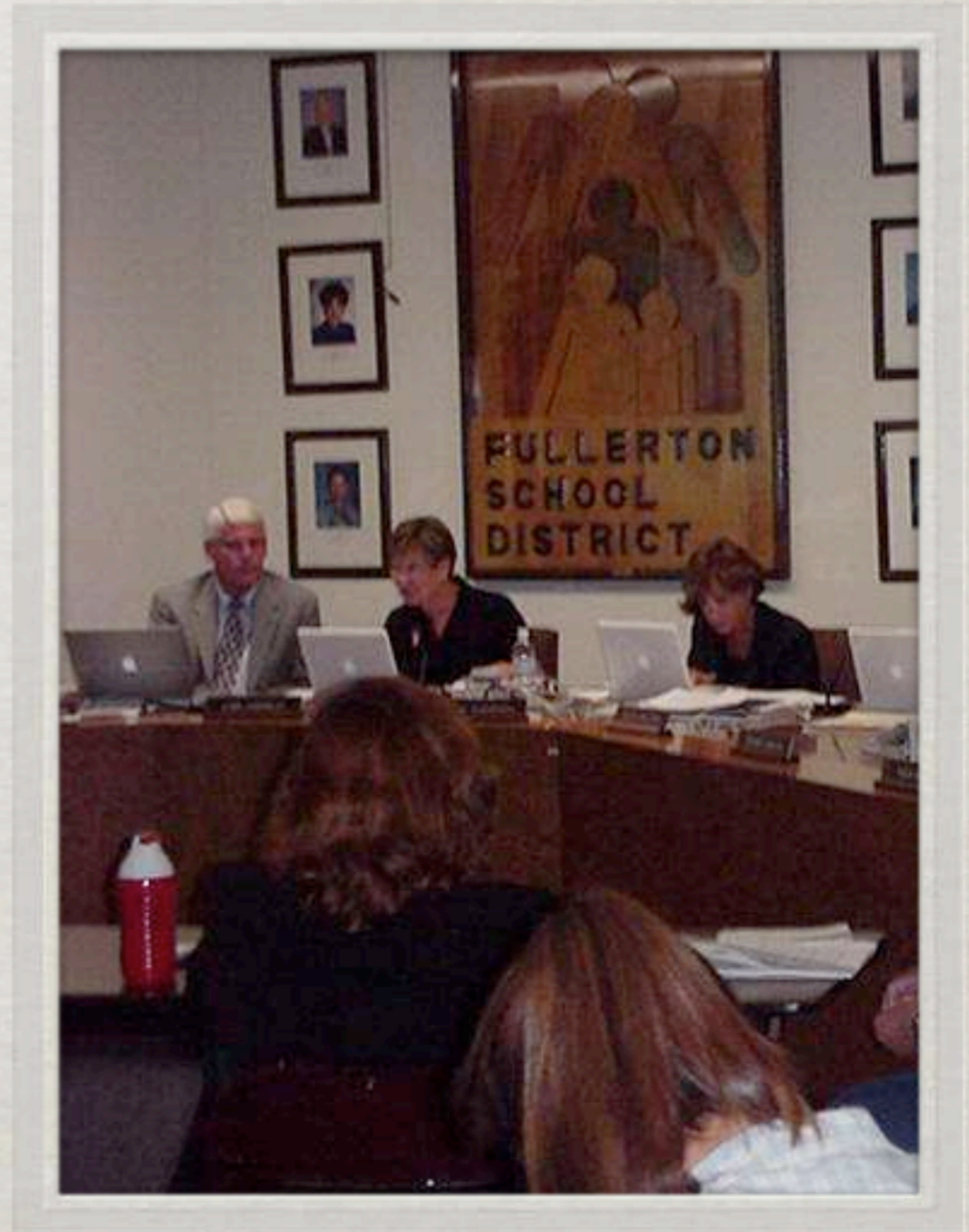
- ☼ Kids need their computers
  - ☼ Discipline, repair, loaner issues
- ☼ Repair and imaging process
- ☼ Developed contacts for future questions

# DISCOVERY PROCESS

- ✿ Stakeholders meet over 6 months
  - ✿ Representatives from Board of Trustees, administration, IT, teachers, curriculum
  - ✿ Review 1:1 programs—videos, discussion
  - ✿ Discussed various issues in sub-groups
  - ✿ Created momentum toward implementation

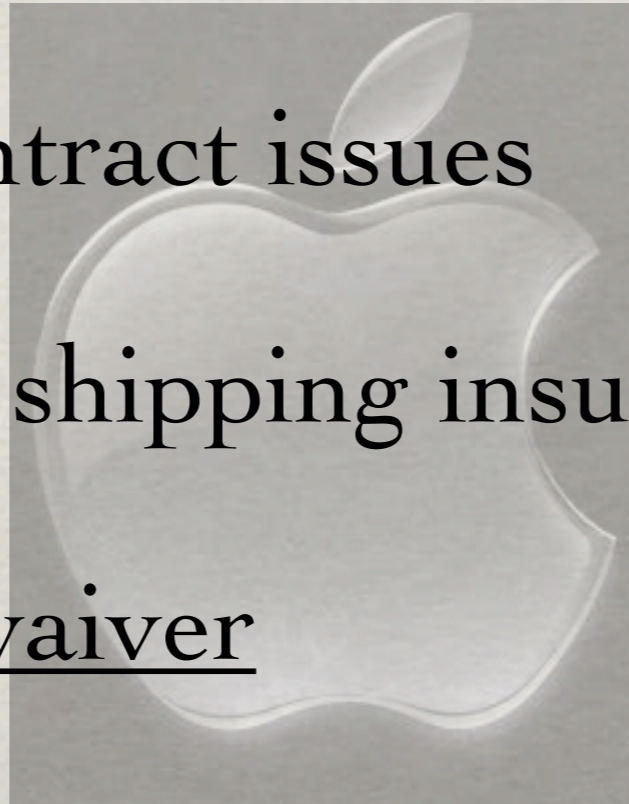
# BOARD APPROVAL

- ☼ Preparatory presentations
- ☼ Approval of lease  
June 22, 2004



# MAKING THE PURCHASE

- ✻ Should be simple — think again
- ✻ Purchase contract issues
- ✻ Imaging and shipping insurance issues
- ✻ Shipping waiver
- ✻ Needs to get easier



# SHIPPING WAIVER

**STANDARD SHIPPING WAIVER**

(Print this on the school's letterhead)

With respect to our request that Apple ship our purchase order # \_\_\_\_\_ for \$ \_\_\_\_\_  
for our school to the following entity:

Name: Gold Country Technology Group

Address: 2520-A Warren Drive  
Rocklin, CA 95677  
916.624.9500

I understand that:

1. Our school owns the equipment once it leaves Apple's shipping location and is responsible for any risk of loss. Such risk of loss may include bankruptcy of Gold Country Technology Group or Gold Country Technology Group comingling our school's equipment with other equipment in their possession and/or their sale of same. Also, Gold Country Technology Group is acting as an agent for the school and not Apple when Gold Country Technology Group accepts delivery of and warehouses the equipment for the school.
2. The Apple warranty of the equipment begins upon shipment (i.e. once it leaves Apple's shipping location).
3. Payment for the equipment to Apple is due within thirty (30) days from the date of invoice, regardless of whether our school has received the equipment from Gold Country Technology Group.
4. Apple shall have the right to audit the school's premises and/or records to determine that the school is in compliance with the terms of this letter.
5. Our school will accept delivery of the complete order from Gold Country Technology Group within thirty (30) days of the date Apple ships the equipment to Gold Country Technology Group.

I have obtained Gold Country Technology Group's permission to ship the order to him/her.

Sincerely,

\_\_\_\_\_  
Name

\_\_\_\_\_  
Name of School

\_\_\_\_\_  
Title

\_\_\_\_\_  
Date

\_\_\_\_\_  
School Address

# SOLE SOURCE

- ☼ Hired consultant who wrote sole source document
- ☼ Board approved sole source agreement for Apple Computer, Inc.

# HARDWARE SPECIFICATONS

- ☼ 1 ghz G4 iBook
- ☼ 512 mbs RAM
- ☼ 30 gb hard drive
- ☼ CD-ROM
- ☼ Airport 802.11g card
- ☼ Case



# SOFTWARE

☼ Mac OS X



☼ iLife suite



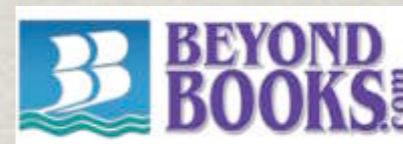
☼ Keynote



☼ Nettekker



☼ Beyond Books

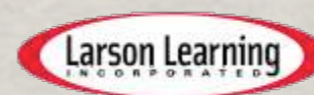


☼ AMP program

☼ AppleWorks



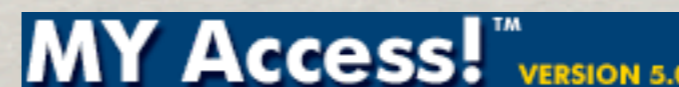
☼ Larson Prealgebra



LarsonMath.com

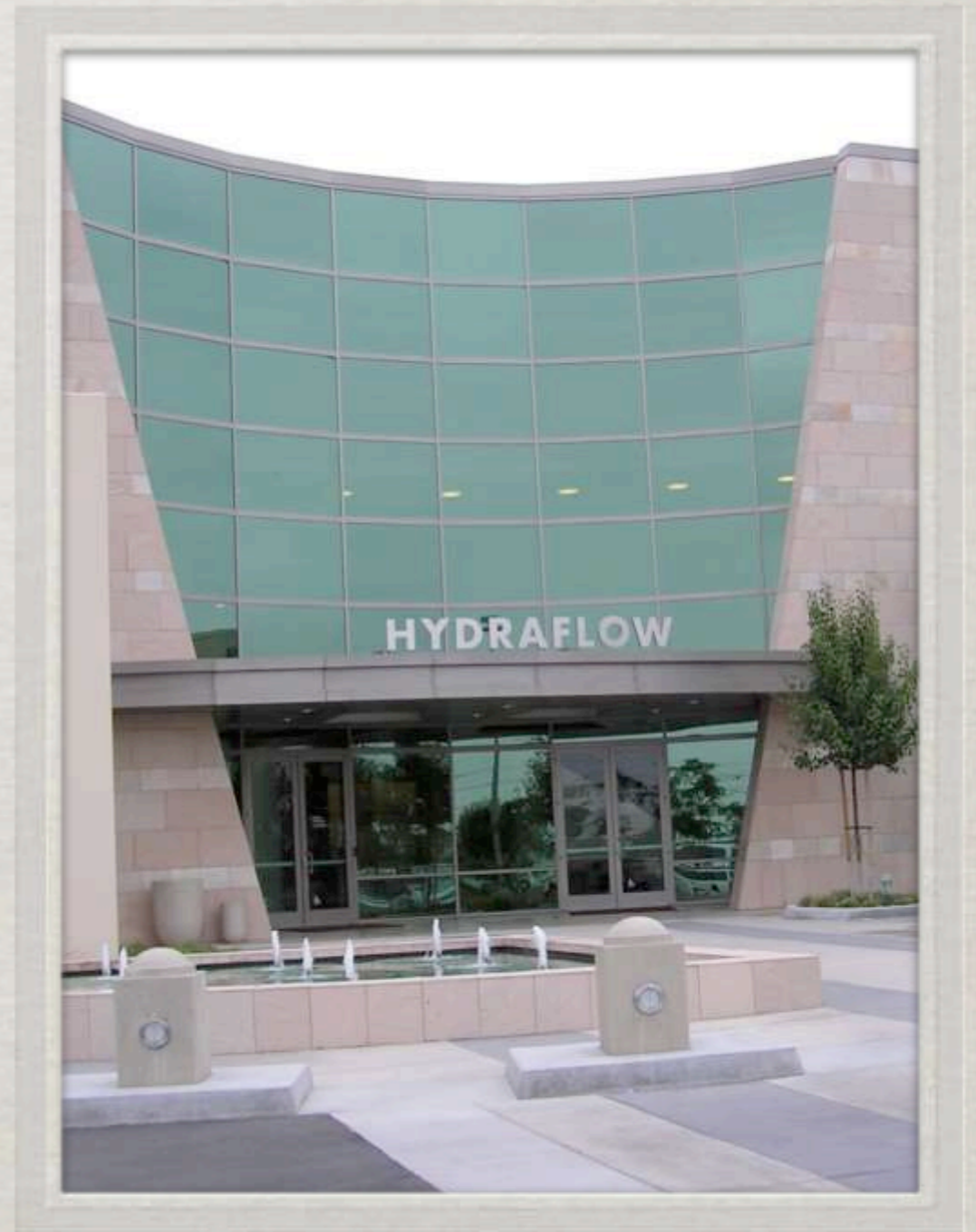
Your online solution  
to improving math skills!

☼ MyAccess!



# TEACHER TRAINING

- ❁ No space available for four-day initial training
- ❁ Business Partner  
Hydraflow, Inc.



# DIGITAL LITERACY TRAINING

- ☀ Mac OS X
- ☀ iLife Applications
- ☀ Nettarekker
- ☀ APDO subscriptions
- ☀ Keynote presentations
- ☀ Instructional strategies



# WORKING ON PROJECTS



# SHARING PROJECTS



# PREPARING THE LAPTOPS

- ✻ Image and personalize the laptops
- ✻ Space needed — Back to Hydraflow
- ✻ District insurance concerns



**\$1,000,000 PILE**

# IMAGING

- ✻ Standardization and personalization of 1,000 iBooks
- ✻ Creation of standard image
- ✻ Use of firewire hard drives and NetRestore
  - ✻ Check [www.bombich.com](http://www.bombich.com)
  - ✻ Export of student data from PowerSchool

# SAMPLE BARCODES

First Name: Russell  
Last Name: Brown  
Student Number: 642726  
School ID: 6028062  
Password: 4198

---



Brown, Russell B.  
Grade 4



First Name: Tam  
Last Name: Doan  
Student Number: 694005  
School ID: 6028062  
Password: 8842

---

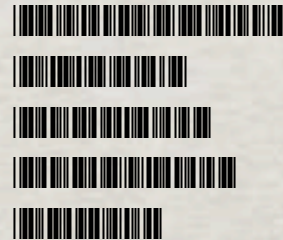


Doan, Tam  
Grade 4



First Name: Elizabeth  
Last Name: Gross  
Student Number: 642632  
School ID: 6028062  
Password: 0935

---

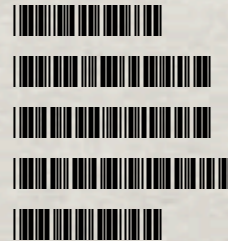


Gross, Elizabeth K.  
Grade 4



First Name: Adam  
Last Name: Hegazi  
Student Number: 693869  
School ID: 6028062  
Password: 3841

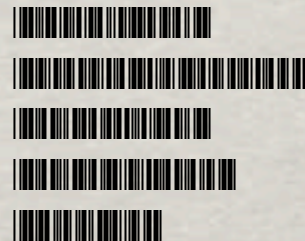
---



Hegazi, Adam B.  
Grade 4



First Name: Trevor  
Last Name: Hildebrand  
Student Number: 642626  
School ID: 6028062  
Password: 3101



Hildebrand, Trevor R.  
Grade 4



# SHELL SCRIPTING

- ✻ iBook is booted off of firewire drive
- ✻ NetRestore places image on iBook
- ✻ Unix shell script takes input from barcode reader ([www.symbol.com](http://www.symbol.com))
- ✻ Script sets up accounts and set rights
- ✻ Sends data file to server at District Office
- ✻ Process takes 12-15 mins. per computer



# IMAGING IN ACTION



# NETWORK INFRASTRUCTURE IMPROVEMENTS

- ✻ Four T1 lines at Fisler and Nicolas
- ✻ Addition of Apple Base Stations
- ✻ Wireless access “open”
- ✻ All web access through web proxy
- ✻ Xserve server at each 1:1 school



# CITY WIFI PROJECT

- ✻ Free wireless pilot
- ✻ Public libraries
- ✻ Downtown Fullerton
- ✻ Roll out February '05



# REPAIR/WARRANTY

- ✿ On-site AppleCare Service
- ✿ Spare parts kit provided per 100 iBooks
- ✿ Intended to minimize impact of 1:1 program on technology support to rest of District

# INSURANCE PLAN

- ✻ Investigated commercial services  
(Safeware)
- ✻ \$55 annual payment to self-insurance fund
- ✻ Coverage described in Liability Waiver
- ✻ No deductible

# FINANCIAL ARRANGEMENTS

- ☼ Parent Pay Sites
  - ☼ Cost of laptop, case, AppleCare warranty, insurance = \$468/yr
  - ☼ Three-year lease
- ☼ Title 1 Site
  - ☼ Year 1 = Insurance + Case = \$72
  - ☼ Years 2 & 3 = \$55
  - ☼ Four-year lease
- ☼ Financial help available

# ROLL OUT MEETINGS

- ☀ Approximately 50 students per meeting
- ☀ Included students and parents
- ☀ Fisler and Hermosa in August
- ☀ Nicolas in September and October

# ROLL OUT AGENDA

- ☼ Review Program Documents and Rules (30 mins.)
- ☼ Submit Documents and Initial Payment (15 mins.)
- ☼ Pick-up iBook Computer (15 mins.)
- ☼ Introductory Technical Presentation (60 mins.)

# DOCUMENTS

- ☼ Lease/Use Agreement
- ☼ Waiver of Liability and Limited Indemnity  
Notice
- ☼ Acceptable Use Policy
- ☼ Payment Form

# DOCUMENT REVIEW LEASE/USE AGREEMENT

Fullerton School District

## PARENT LAPTOP LEASE-PURCHASE AGREEMENT

### **Purpose**

In order to provide students with access to the Fullerton School District's ("District") online educational network, and to foster technology education, project-based learning, and to promote student, parent, and teacher access to technology, the District is conducting a pilot program, described more fully in the attached document entitled Program Description. Pursuant to this pilot program, each student participating in the Program will be issued an individual laptop computer as a supplement to his or her educational program. The success of this Program is contingent upon sufficient parental support in the form of voluntary monetary contributions. To that end, the purpose of this Parent Laptop Lease Purchase Agreement ("Agreement") is to allow parents or guardians (collectively, "Parent") of benefited students to lease a laptop computer for their child, as authorized by the California Education Code section 17453.1, along with related equipment, warranty and limited indemnity by the District for damage or theft of the laptop or related equipment, as provided in the Program Description and Waiver of Liability and Limited Indemnification Notice ("Liability Waiver"). The District will arrange access to a laptop and related equipment to students whose families cannot afford the contribution.

### **Lease-Purchase of Laptop and Related Equipment**

Under this Agreement, the District agrees to lease to Parent, and Parent agrees to rent from the District, the laptop and related equipment described in the attached Description. This Agreement will begin on the date the Agreement is signed, and continue for three (3) years. After three (3) consecutive years of payment of rent under this Agreement, or at a time left to the sole discretion of the District, Parent will be given the option by the District to purchase the laptop that he or she has leased pursuant to this Agreement, according to the terms in the Program Description.

### **Payments**

The payment due from Parent to District for the laptop and related equipment is set forth in Attachment A ("Parent Contribution"). Parent may elect to pay on either a monthly (based on a ten-month school year), quarterly, or annual basis. **By signing this Agreement, Parent understands that, absent grounds for termination as provided in the Program Description, Parent is agreeing to continue to make the Parent contribution for the entire length of the Program, which is three years.**

### **Maintenance and Repairs**

The District shall provide an AppleCare warranty for each laptop, the cost of which is included in the Parent Contribution, which will be available onsite during school hours, and by telephone after school hours, for warranty repair of laptop and related equipment leased under this Agreement.

### **Waiver of Liability and Limited Indemnity**

In order to make this Program possible, a portion of the Parent Contribution will be applied to the cost of the Liability Waiver, and the District will be responsible for theft or damage to the laptop and related equipment issued pursuant to this Agreement, in accordance with the terms of the Liability Waiver.

**By signing below, you are indicating that you have read the Parent Laptop Lease Agreement in its entirety, including the Program Description, the Liability Waiver, and Attachment A, and agree to all terms and conditions included in each of these documents.**

District: \_\_\_\_\_ Date: \_\_\_\_\_

Parent: \_\_\_\_\_ Print Name: \_\_\_\_\_

Name of Student: \_\_\_\_\_ Grade of Student: \_\_\_\_\_

\_\_\_\_\_

# EXPLANATION

- ✿ Describes one-to-one laptop program
- ✿ Describes three-year lease arrangement
- ✿ Agreement to make payments
- ✿ Three year AppleCare warranty included with onsite repair at school
- ✿ Insurance (Liability Waiver) included
- ✿ Attachment A is payment form

# ROLL OUT HOW IT LOOKED



# PAYMENT



# COMPUTER PICKUP



# TECHNICAL OVERVIEW FISLER



# TECHNICAL OVERVIEW HERMOSA DRIVE





# TECHNICAL OVERVIEW

## NICOLAS



# SUPPORT PERSONNEL

- ☼ Computer Aide/Technician (3 sites)
  - ☼ Triage for warranty, minor repair
- ☼ Teachers on Special Assignment (25%)
- ☼ Certificated Staff member at each site
- ☼ Insurance repairs by District technicians

# PROJECT COST

- ☼ Total project about \$1.6 million
- ☼ Laptop cost about \$1 million
- ☼ Non-Apple software budget \$89 per computer (Nettrekker, MyAccess, Beyond Books)
- ☼ Apple Software Maintenance (AMP) \$60 (iLife, iWork, Mac OS X)

# UNANTICIPATED ISSUES

- ✿ Image search engine thumbnails
- ✿ No clearing of browser history
- ✿ Difficulty scheduling staff development
- ✿ Getting warranty service flowing

# REIMAGING PROCESS

- ✻ Reimaging of student laptops
- ✻ Coordinating with release of new version of Macintosh OS X operating system
- ✻ Will likely occur in late summer

# ANECDOTAL OBSERVATIONS

- ☼ Data collection on-going
- ☼ Engagement in class and at home
- ☼ Depth of study

# 1:1 IN ACTION

