



iPads: One 2 One

From Rationale 2 Roadmap





Enoch Kwok

Director of Educational Technology & Information Services

Oak Park Unified School District



iPads 1-to-1

Why - Rationale

How - Roadmap

What - Sample Apps

We Believe....

All students should receive instruction that is **differentiated**. Learning experiences should emphasize **depth, complexity, and novelty**.

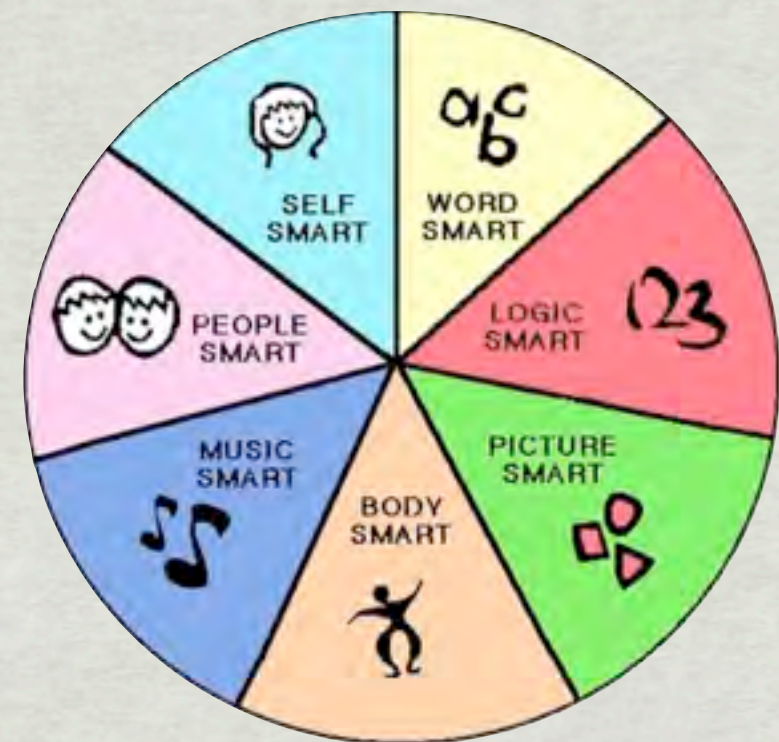
(OPUSD Moral Imperative Goal 1a)



Differentiation

✱ Addresses individual student **needs**:

- unmastered curriculum **standards**
- optimum **learning modality**
- **motivation** and engagement
- learning **pace**



In the classroom....



- * Students have differing learning modalities (visual, auditory, kinesthetic, etc.) and learning paces
- * **Teachers** provide the differentiation
- * Class size **limits** time for differentiation (1 vs. 22-36)
- * One lesson delivery style does not fit all....

Can Technology Provide a Solution?



Computer Technology

Effective Educational Computing Use:

(each level builds on the one above)



Level 1: Teacher - Administrative Tasks

Level 2: Teacher - Lesson Delivery (21st Century Classrooms)

Level 3: Student - General Productivity Tasks (COWs)

Level 4: Student - Targeted practice, assessment and reteaching of specific content skills and mastery

Why 1-to-1 Computing?

The GOAL:

Differentiated instruction

The KEY:

Immediate feedback and reteaching

The TOOL:

Lesson software that respond instantly to each student's needs



Learning 24/7

- ✱ 1-to-1 Mobile computers allow:
 - On-line class discussions (My Big Campus social media “sandbox”)
 - student peer collaboration
 - access to tutorials, on line practice, and reteaching after the school bell rings



Why iPads?



1st Learning Appliance

Instant On

Intuitive / Easy to Use

Reliable (all day battery)

Optimized for One Task





Myth of the Device

- * Hardware defines what computer can't do is and mainly a conduit for software.
- * **Software** is what defines a computers usefulness
- * Find effective software, then choose the hardware that it runs on.
- * High quality **app availability** is more important than hardware speeds and specs



Optimized = Appliance

- ✱ Apps reprogram the iPad Learning **Ap**pliance for new tasks
- ✱ Each app can be highly targeted for narrow curricular focus
- ✱ Environmentally aware apps compel engagement -through accelerometers, compasses, light and sound sensors



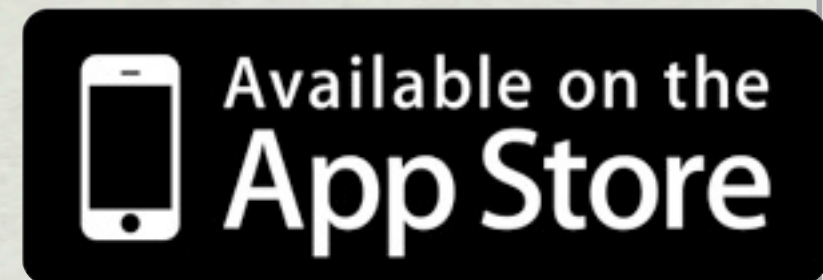
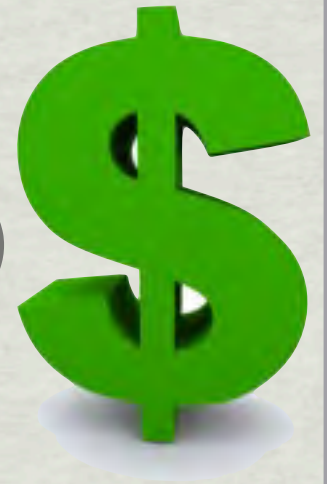
High Quality Apps

✱ Motion Math



Apps vs. Programs

- * Cost: \$.99/free vs. \$35-\$70 per seat (\$800/lab lic.)
- * Targeted focus vs. general usage
- * Democratized publishing vs. mainline publishers
- * Trivial to find, buy, and install apps vs. conventional computer program
- * Much deeper pool of availability and selection for apps vs. programs



Common Core



- ✱ SBAC testing regime arrives 2014-2015
 - Computer adaptive testing
 - Performance based tasks
- ✱ iPads (9.7" screens) are approved testing vehicle
- ✱ The 1 to 1 advantage for students

What about eTexts?

* The Good:

New **interactive** learning paradigms

Instantly **updatable**



* The Bad:

No cost savings (yet): Buying vs. **Renting/Subscriptions**

Few quality titles for K-12 as of Summer 2013

* The Ugly:

iBooks License Agreement does not support institutions (yet) !

Hopefully, this will change in the near future....



Why 1-to-1 iPads?

Differentiation & Engagement

- ✱ multi-dimensional interaction and kinesthetic engagement reach students with different learning styles
- ✱ Immersive learning environment: swiping, tilting, pinching, speaking, tapping draws students in
- ✱ Learning **Appliance**: Instant/Intuitive/Reliable/Optimized

HOW ?

Three Year Roadmap

STEP BY STEP

Y0: All teachers issued temp iPad (Summer 2013)

Y1: iPad Learning Centers (2013-14) 6-8 devices

Deploy next gen wireless network (Summer 2014)

Y2: Mobile iPad Learning Karts (2014-15) 36 devices

Y3: Student 1-to-1 iPad program deployment (2015-16)

TechLITEs

STEP BY STEP



- ✱ **T**eacher **L**eaders **I**ntegrating **T**echnology in **E**ducation
 - at least 2 per site (upper/lower MathSci/EngSS)
 - meet with Director of Tech at least monthly
 - first access to technology (learning centers/MiLKs)
 - conduct iPad training at staff meetings/buyback workshops
 - Stipend position, will attend CUE every other yr.

Y-0 Setting the Stage

Spring-Summer 2013: iPad Exploration

- * Some TechLITEs receive iPad Learning Centers (May)
- * Teachers receive one temporary iPad loaner (16Gb) for the summer/Fall (June)
- * Create Staff Apple ID using district email address, use personally purchased iTunes gift cards to “buy” apps
- * **Goal: Use iPad for general productivity (L1)**
- * Begin to explore possible apps for grade level/subject

Y-1 Learning Centers

2013-14: iPad Learning Centers

- Each teacher issued next gen iPad (32Gb) in Fall
- Goal - use iPads to deliver lessons via Reflector (L2)
- Deploy Learning Centers to 50% of Elem classrooms
- Deploy Learning Centers to select Secondary classrooms that can use 8-9 iPads per classroom
- Mobile iPad Learning Kart (36 iPads) for TechLITEs
- Learn how to use VPP program to buy apps in bulk

Y-2 Got MiLK

2014-15: Mobile iPad Learning Karts

- Deploy next gen wireless network
- Complete iPad learning centers to all Elem classrooms
- Deploy at 1 MiLK per grade level per site (Elem)
- Deploy MiLKs to Secondary School departments
- Goal: teachers explore performance based lessons, students take SBAC practice test on iPad (L3)
- Build public support for 1-to-1 iPad Lease-to-Own program

Y-3 Student 1-to-1

2015-16+: iPads for Every Student

- Districtwide **1-to-1 Student iPad** rollout (tentative)
- Teachers utilize performance based lessons and projects with iPads
- Students use iPads for SBAC Common Core computer adaptive assessment
- Goal: Every student using iPads for depth, complexity, and novel lessons. (L4)

What Will It Look Like?

Standard Teacher Load

- * Pages, Keynote, Numbers, iMovie, Office2 HD
- * Documents by Readdle for local document storage
- * Wireshare - wireless upload/download images, videos, and files from iPad via web browser
- * Dropbox for personal doc management

Math

- Long Division (any Math app by Esa Helttula:A+)
- ThatQuiz.org (web based quiz generator handles classes)
- Math Drills (select focus area)
- Quick Math (unique input)
- FactorSamurai (Fruit Ninja format of Math drills)

Language Arts

- Bluster
- Toy Story (Read Along)
- Free Books (Huckleberry Finn - pub domain)
- Comic Strip

Science

- Go Sky Watch Planetarium
- The Elements
- Solar System
- Spacecraft 3D

Arts & Other

- ✱ **Art Authority** - licensed HQ images from Art museums around the world
- ✱ **Word Lens** - foreign language Virtual Reality instant translation (Spanish, German, Italian, French)

Social Science

✱ National Geographic World Atlas

Teaching Tools

- ✱ Educreations (interactive whiteboard/recording)
- ✱ Class Dojo (class participation management)
- ✱ Common Core Resources
 - iTunes U (common core strategies)
 - CommonCore app (lists all CC standards)

How Do We Get Apps?

✱ Important Concepts:

1. The iTunes account owns the app (not the device). Choose the right account before downloading apps. (Not district OPUSDbase@)
2. iTunes accounts normally are limited to 10 devices (unless they are “imaged” to the same account) - LC’s capped at 10 devices.
3. Apple Volume Purchase Program (VPP) can give 50% discount when 20 or more licenses for an app are purchased in one transaction.

iTunes Account Tiers

- ✱ **District** iTunes account (**OPUSDbase@**)

Base load of paid apps and library of free apps

- ✱ **Staff** Apple ID iTunes account (**Teacher@**)

redeems VPP install codes furnished by TechLITE

may use retail iTunes Gift Cards to prepay for apps

- ✱ **Learning Center** iTunes account (**Teacher_LC@**)

Teacher redeems VPP install codes once for LC account but keeps track of number of iPads it is installed on

- ✱ **Personal** iTunes account (**home@gmail....**)

- ✱ For this Summer, staff should use their Staff Apple ID (NOT the district OPUSDbase@ account) and use retail iTunes gift cards to pay for apps to explore over the summer
- ✱ Next Fall, TechLITEs will be trained on Using VPP program to create redemption codes. App Vouchers will be a site/department expense
- ✱ MiLKs will require a different plan to manage app deployment and licensing

Twitter.com/app4ed

Ed Tech (app4ed) on Twitter

Home Connect Discover Me Search

Ed Tech
@app4ed
I am a Technology Director for a public K-12 school district in California. I recommend these apps for their K12 educational or family friendly value.
Southern California

Edit your profile

616 TWEETS
1 FOLLOWING
194 FOLLOWERS

Tweets

Following
Followers
Favorites
Lists

Similar to you

Ross Rogers @ruaniteit
Follow

CUE- admnSIG @admn_sig
Follow

Sara Scribner @sarascrib
Follow

© 2012 Twitter About Help Terms Privacy
Blog Status Apps Resources Jobs
Advertisers Businesses Media Developers

Tweets

Ed Tech @app4ed 14 Oct
SALE FREE Foreign Language: Learn Chinese Mandarin (univ)
isurl.me/200H -adaptive flashcards-vocab, stroke order, grammar.
Brainscape
Expand

Ed Tech @app4ed 12 Oct
SALE FREE PreK Activities: Old Mac Donald HD (iPad)
isurl.me/1ZDW - high quality app provides 12 interactive pages and 35 activities
Expand

Ed Tech @app4ed 12 Oct
SALE FREE PE: Cardiograph Heart Rate Monitor (univ)
isurl.me/1ZCY - uses device's camera to measure blood flow and show heart rate.
Expand

Ed Tech @app4ed 12 Oct
SALE \$.99 Anatomy: Muscle and Bone Anatomy 3D (iPad)
isurl.me/1ZCM - view zoom and rotate in on virtual model of human body. quizzes.
Expand

Resources

- ✱ Daily feed of K-12 free or sale apps

www.twitter.com/app4ed

- ✱ District iPad Resources

www.oakparkusd.org/ipads

- ✱ Apple iPad User Guide

<http://help.apple.com/ipad/6>