Moving Beyond the Debate
on Technology and Young Children

Warren Buckleitner
Children's Technology Review

Welcome

Agenda

- The debate about technology and young children.

- What kind of child do we want to raise?

- Examples.

- What is a screen?

- Assessing quality

- The NAEYC position statement.

About me:

- One of six kids, grew up and taught in Michigan, live in NJ

- BS Elementary Education, CMU

- MA Human Development, Pacific Oaks

- Ph.D., Educational Psychology, Michigan State University

- Sr. Consultant, High/Scope Foundation

- Preschool and elementary teacher (yes, I made snacks)

- Reviewer: CTR, Scholastic Parent & Child, New York Times.
  I attempt to be objective, but please see: http://childrenstech.com/about/disclosures and make up your own mind.

- Parent of two daughters.

- Member of the "B's" NAEYC Technology Interest Forum.

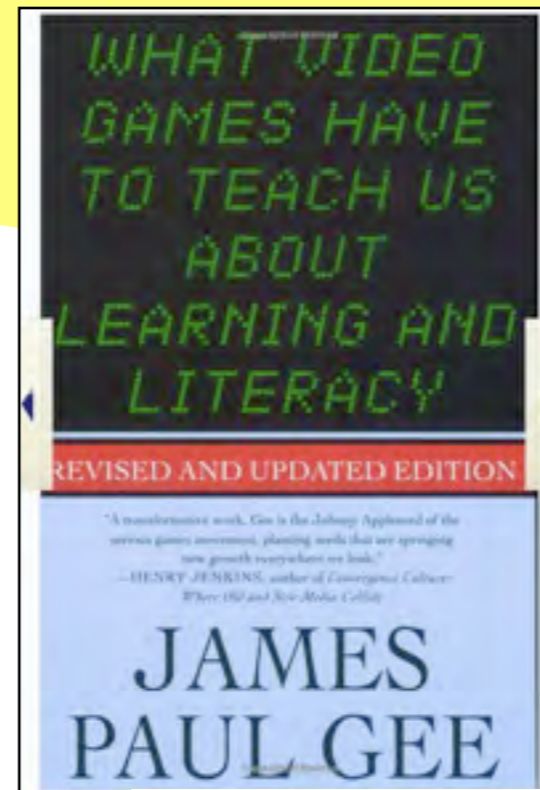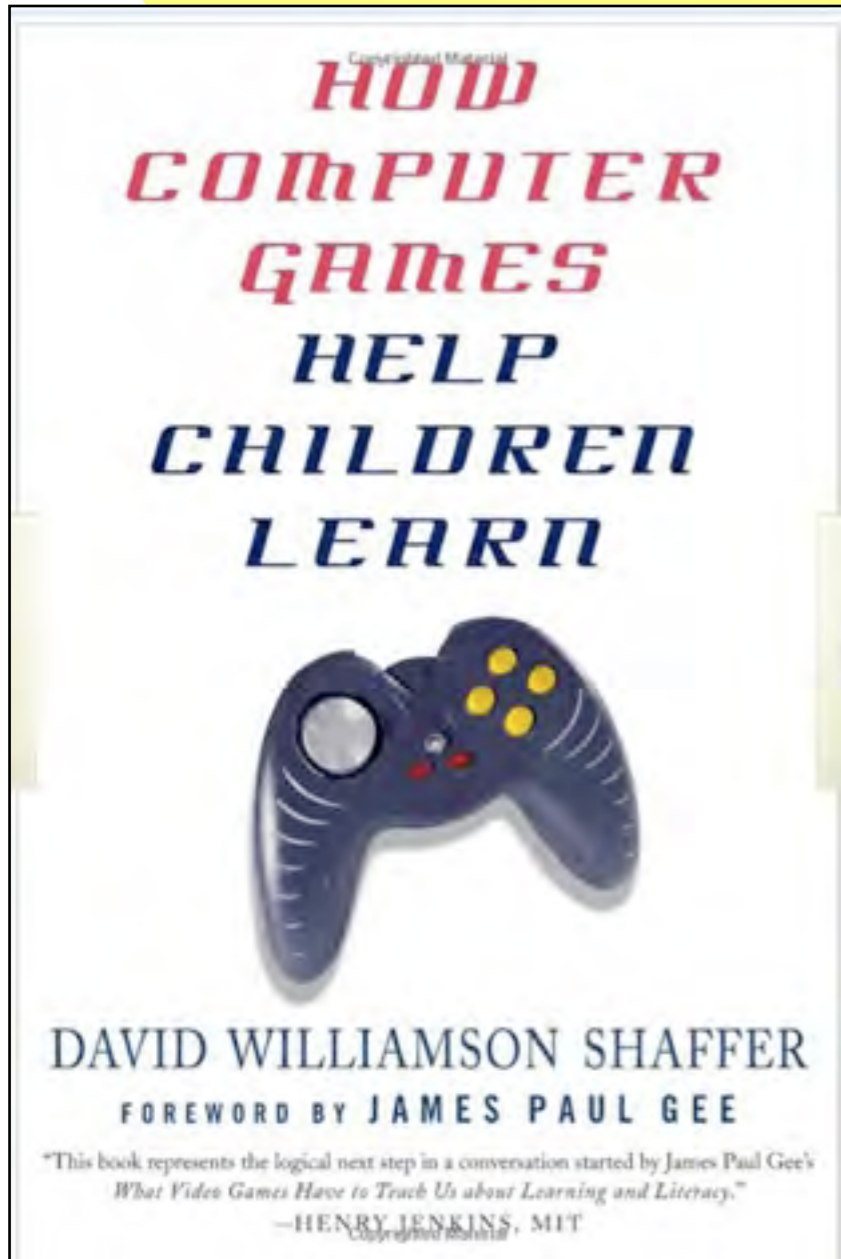- One of many who advised on the NAEYC position statement.

http://childrenstech.com/files/2011/05/g3-1.pdf

The debate

Did you hear about kids and digital media?
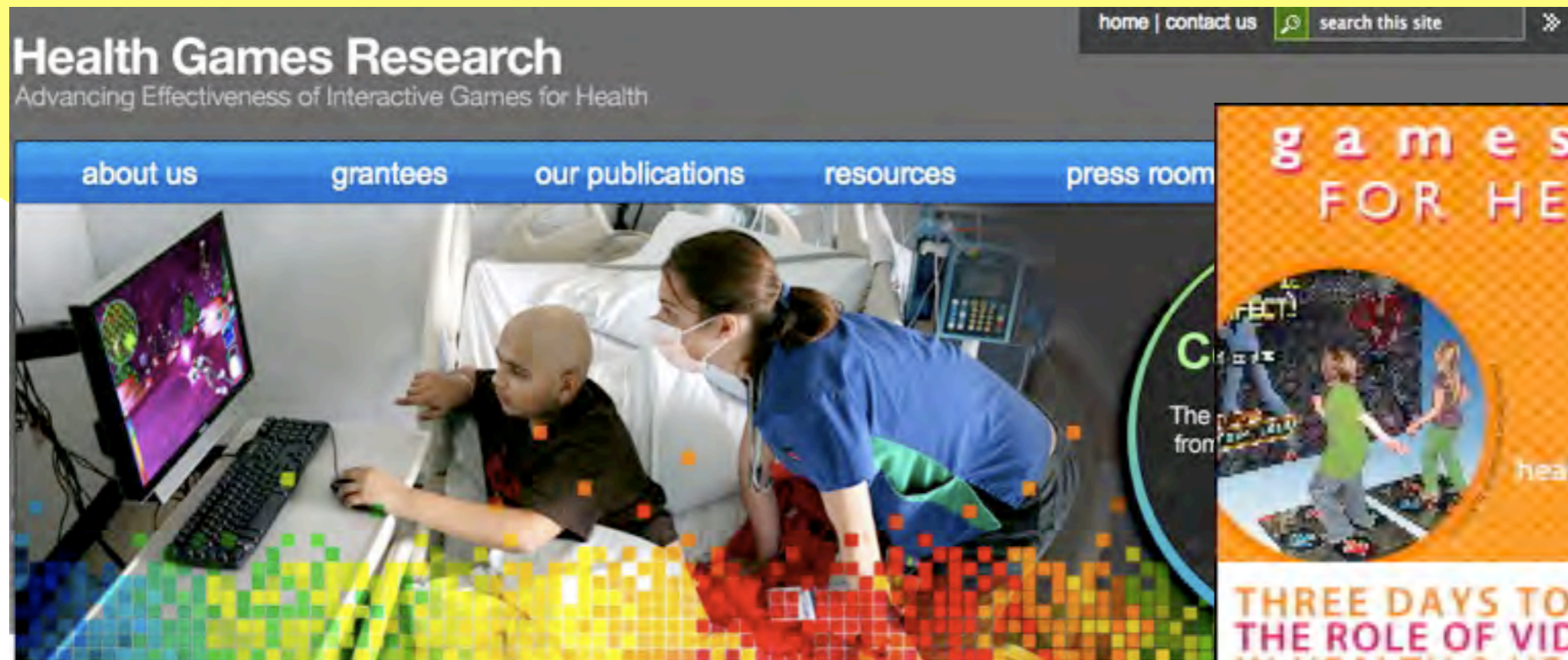
… it promotes learning …

See Henry Jenkins' "transmedia," www.henryjenkins.org or Mark Prensky's "digital natives." (www.markprensky.com)

You've no doubt longed for some of MacArthur Foundation's five-year, $50 million digital media and learning money? See http://digitallearning.macfound.org

… is healthy …

Health Games Research
Advancing Effectiveness of Interactive Games for Health

home | contact us | search this site

about us   grantees   our publications   resources   press room

games FOR HEALTH

health & videogame conference june 2009 boston

THREE DAYS TO EXPLORE THE ROLE OF VIDEOGAMES IN HEALTH & HEALTHCARE

5ᵀᴴ ANNUAL **GAMES FOR HEALTH CONFERENCE**
JUNE 11-12, 2009 HYATT HARBORSIDE BOSTON
PRE-CONFERENCE WORKSHOPS JUNE 10, 2009

www.gamesforhealth.org
207.773.3700 gfh2009@gamesforhealth.org

Robert Wood Johnson Foundation

See www.healthgamesresearch.org
 to learn about Robert Wood Johnson's
$8.25 million Health Games Research
initiative.

… it's unhealthy …

FOOL'S GOLD:
A Critical Look at Computers in Childhood

CRISIS IN THE KINDERGARTEN

Why Children Need to Play in School

WOULD YOU PUT YOUR HEAD IN A MICROWAVE OVEN?

RADIATION HAZARD

2.46 GIGAHERTZ

Gerard Goyette, MD

Failure to Connect

How Computers Affect Our Children's Minds—and What We Can Do About It

Jane M. Healy, Ph.D.

Author of Endangered Minds

Reprinted from *Journal of Australasian College of Nutritional & Environmental Medicine* · Vol. 22 No. 2; August 2003: page 3-8

Children and Mobile Phones … Is There a Health Risk? *The case for extra precautions*

ACNEM

Don Maisch AssocApplSciStud
PhD Research Student (Wollongong University)

Edward Miller and J...

A lot of energy and media attention goes to keeping kids "safe." Groups like the Coalition for a Commercial Free Childhood, the Alliance for Childhood remind us that technology use with children should be studied.

... it causes mental illness...

Virtual Child – The terrifying truth about what technology is doing to children

Virtual Child is written by a pediatric occupational therapist and child development expert Cris Rowan who is passionate about changing the ways in which children use technology. *Virtual Child* is designed for parents, teachers, health care professionals, government, researchers and technology production corporations, and contains strategies to *manage balance* between activities children need to grow and succeed with technology use.

LEARN MORE   BUY NOW

Extensive research review by Rowan indicated that many of children's school performance issues were related to increased use of TV, videogames and internet. As child developmental delays and behavior disorders continued to escalate, Rowan stepped away from the school setting and developed *Zone'in Programs Inc*. home to Zone'in Products, Workshops, and Training.
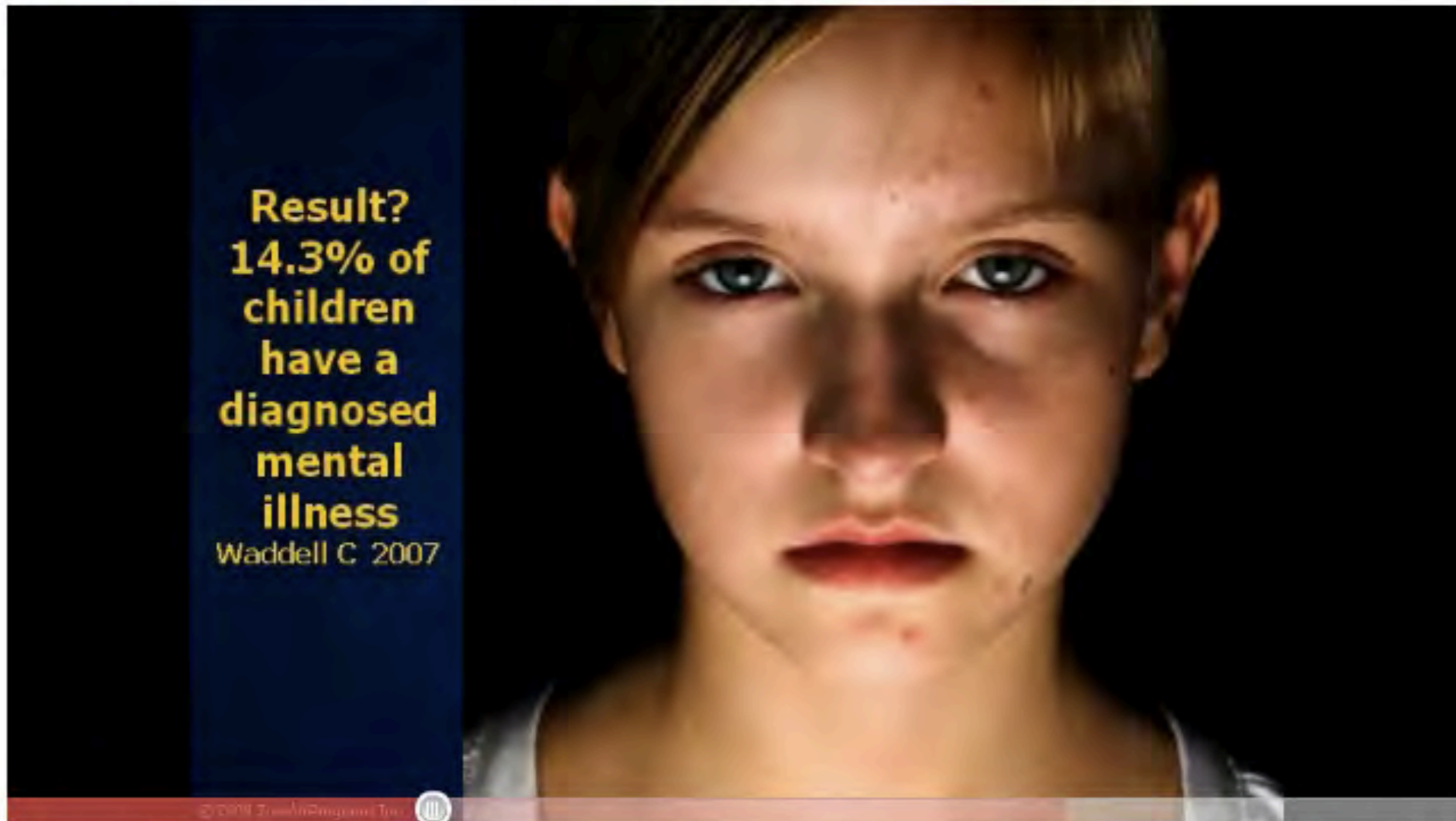
... kids use it a lot.

"Today, 8-18 year-olds devote an average of 7 hours and 38 minutes (7:38) to using entertainment media across a typical day (more than 53 hours a week). And because they spend so much of that time 'media multitasking' (using more than one medium at a time)

they actually manage to pack a total of 10 hours and 45 minutes (10:45) worth of media content into those 7½ hours.

I read all these studies and think, what does it all mean. And then I ask a kid "does technology make your life better" and they say...

http://www.kff.org/entmedia/mh012010pkg.cfm
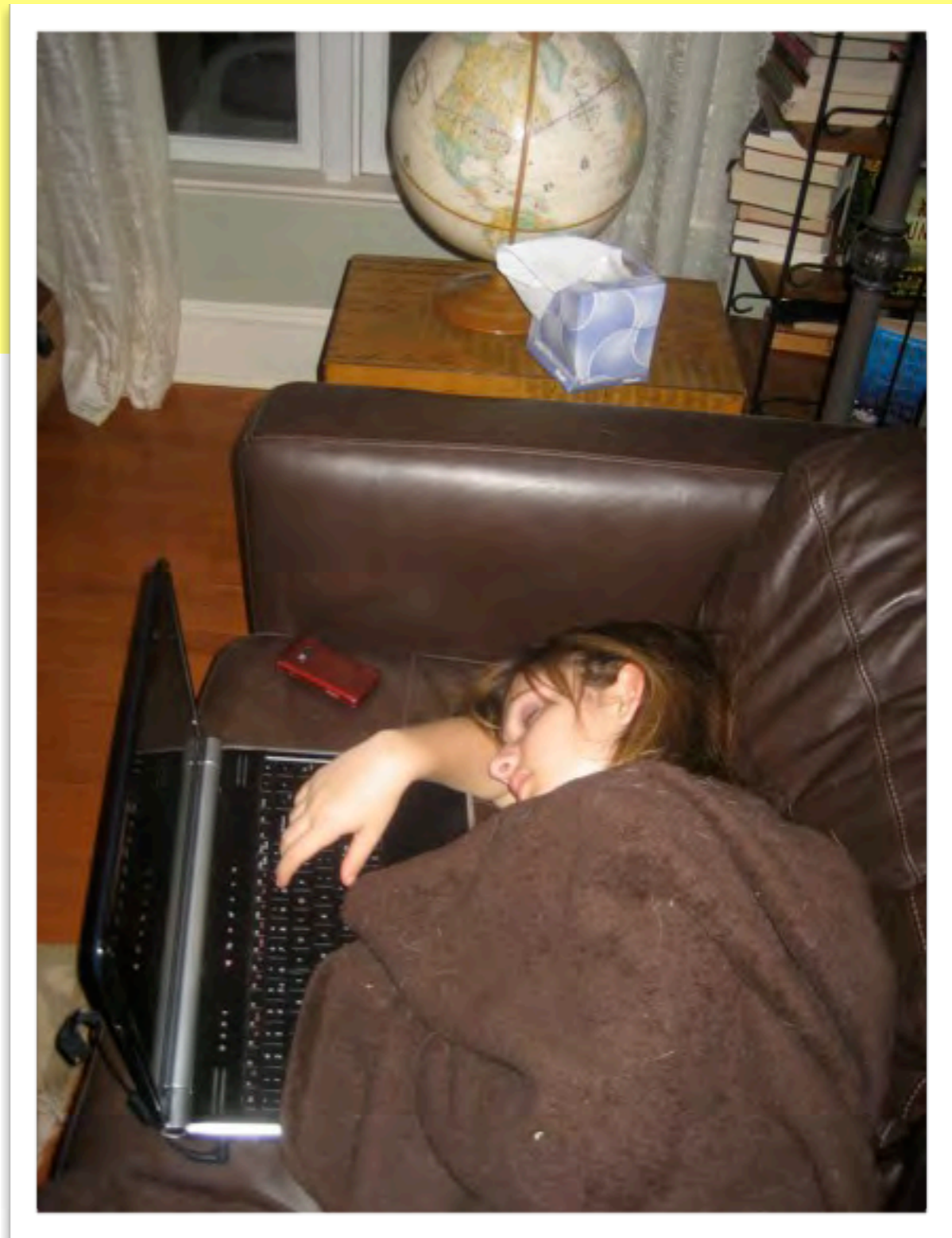
What kind of child do we want to raise?

Technology behaviors

Less desirable	More desirable

Technology behaviors

Less desirable	More desirable
• Unhealthy (defined by you) use of video games, inappropriate content. • Puts tech ahead of people. • Fearful. • Unaware of the power.	• Confident. • Controls rather than controlled by the technology. • Understands ads, google ads, Facebook sponsors and online profiles. • Can handle a debit card.

WASHINGTON — A married congressman from upstate New York resigned suddenly Wednesday after a scandal erupted over emails and a shirtless photo supposedly sent to a woman in response to a Craigslist dating ad.

The Craigslist Congressman
"I'M A VERY FIT FUN CLASSY GUY. 6FT 190LBS BLOND/BLUE"

Hunterdon teen dies of injuries after single-car crash

Published: Sunday, March 13, 2011, 8:44 AM   Updated: Sunday, March 13, 2011, 8:10 PM

By **Jessica Calefati/The Star-Ledger**
Follow

Like   165 people like this. Be the first of your friends.

Tweet 7   Share

Share 165   Email

Comment 39   Print

READINGTON — A Hunterdon Central Regional High School senior died Saturday night as a result of his injuries from a car crash.

Kevin Gilbert, 18, was pronounced dead just before 7 p.m. at Robert Wood Johnson University Hospital, according to Sgt. Chris DeWire of the Readington Police Department.

Gilbert was traveling on County Road 523, just north of West Woodschurch Road in Readington when the single-car accident occurred about 6 a.m., said DeWire. Gilbert was flown by helicopter to Robert Wood Johnson University Hospital for treatment.
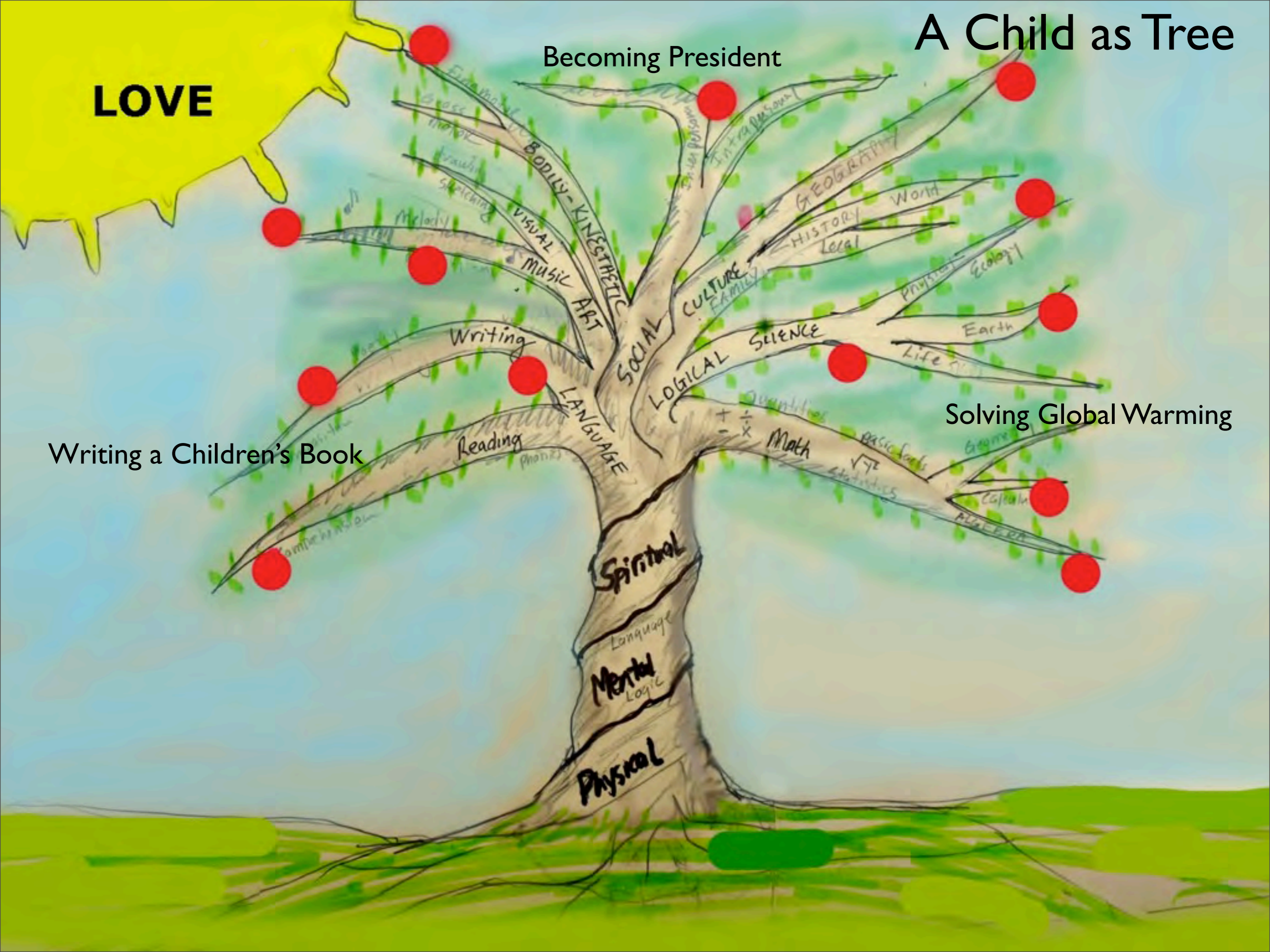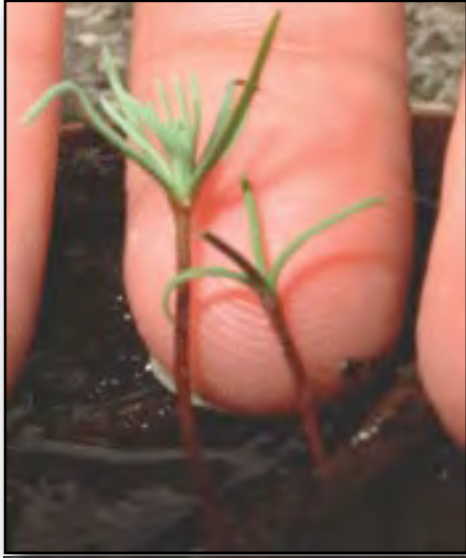
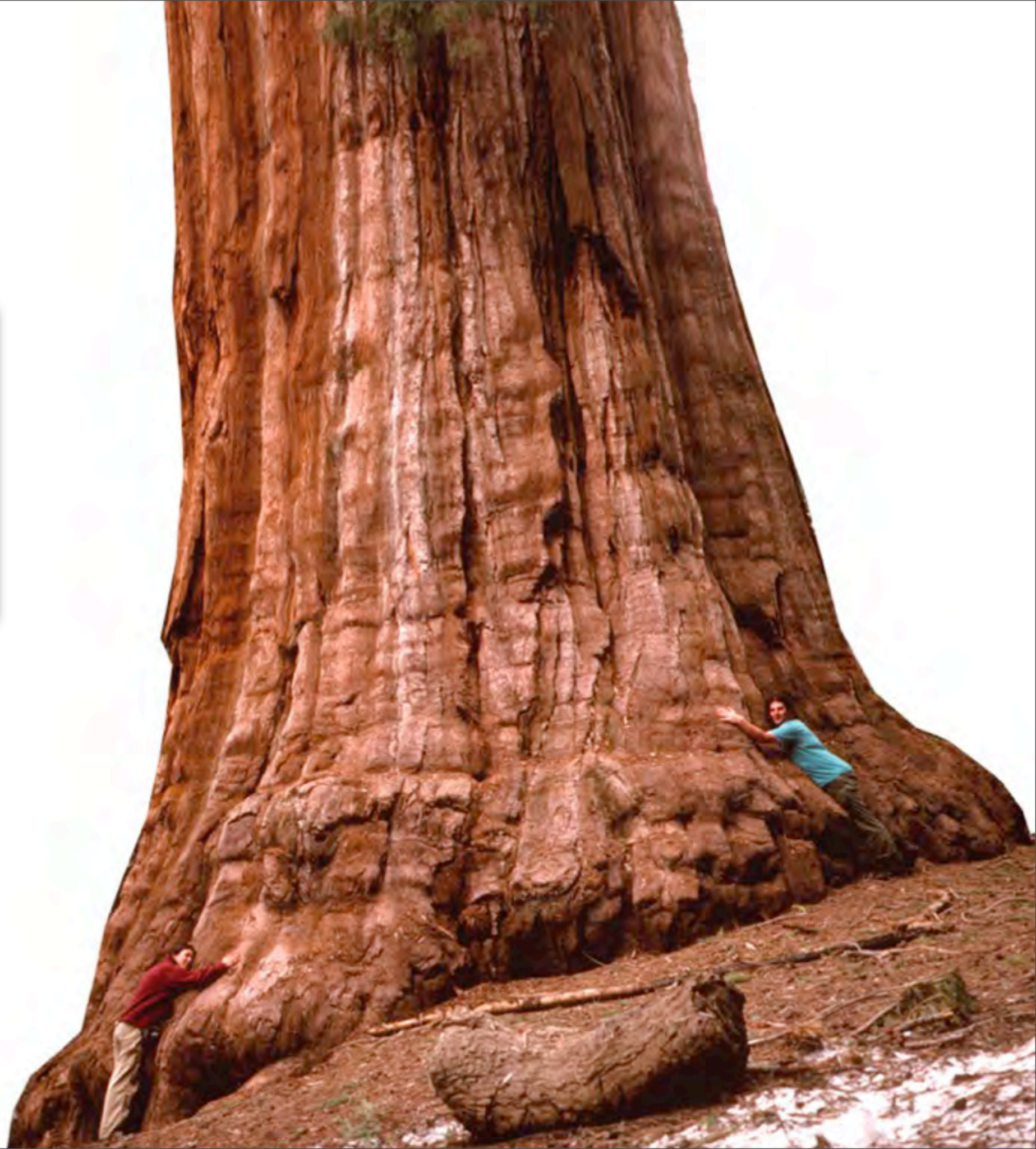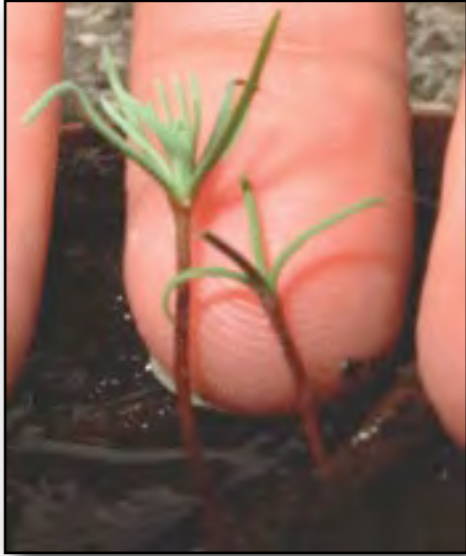Aristide

Technology is like Fertilizer....
Access to quality, developmentally appropriate technology at each stage can increase a child's chances of bearing fruit.
But too much can burn the plant.

View it from a theoretical framework:
How would each see technology?

Lev Semenovich **Vygotsky** (1896-1934)
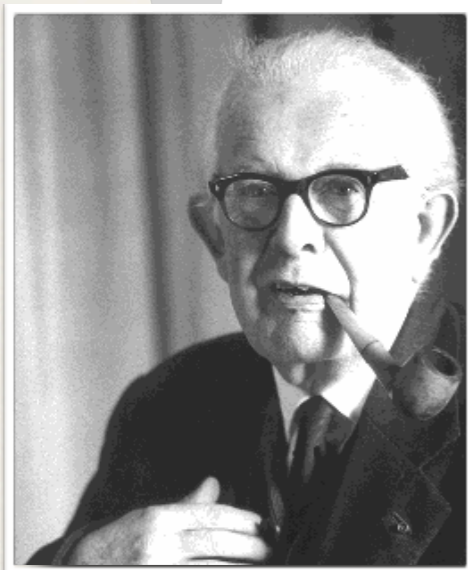
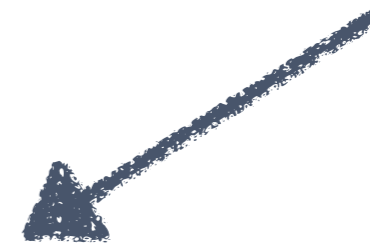Abraham **Maslow** (1908-1970)

BF Skinner (1904-1990)

Text

Jean **Piaget** (1896-1980)
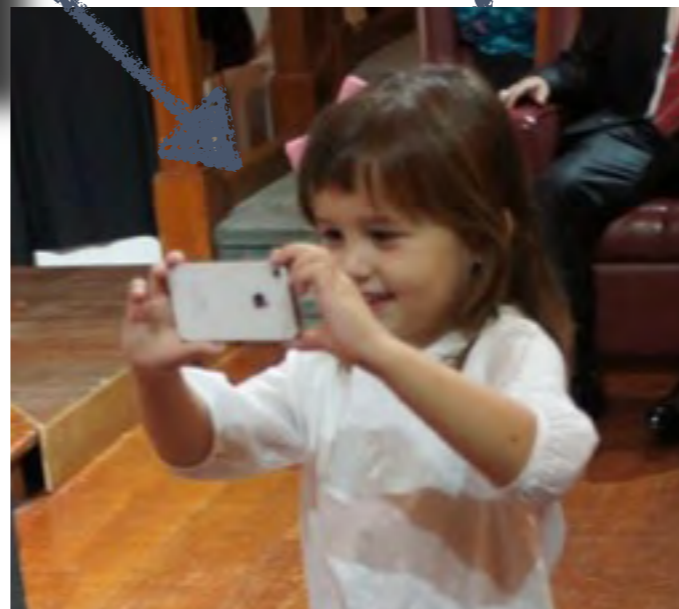
Sergey Brin, Google Co-Founder, Talks About his Montessori Education, and His First Computer

Technology examples

Prenatal: Text4Baby.org

Babies & Toddlers
Birth to 2

Rattles, toys & apps like doorbells, piano keys and light switches, high in cause/effect that are "food for the senses."

Symbolic representations less effective at this stage, especially if non-interactive or are low in child control.

A mellow cat.

Sound Shaker
Builds music, melody, rhythm, causality. zinc Roe Design. www.zincroe.com
$2. Ages 2-4.
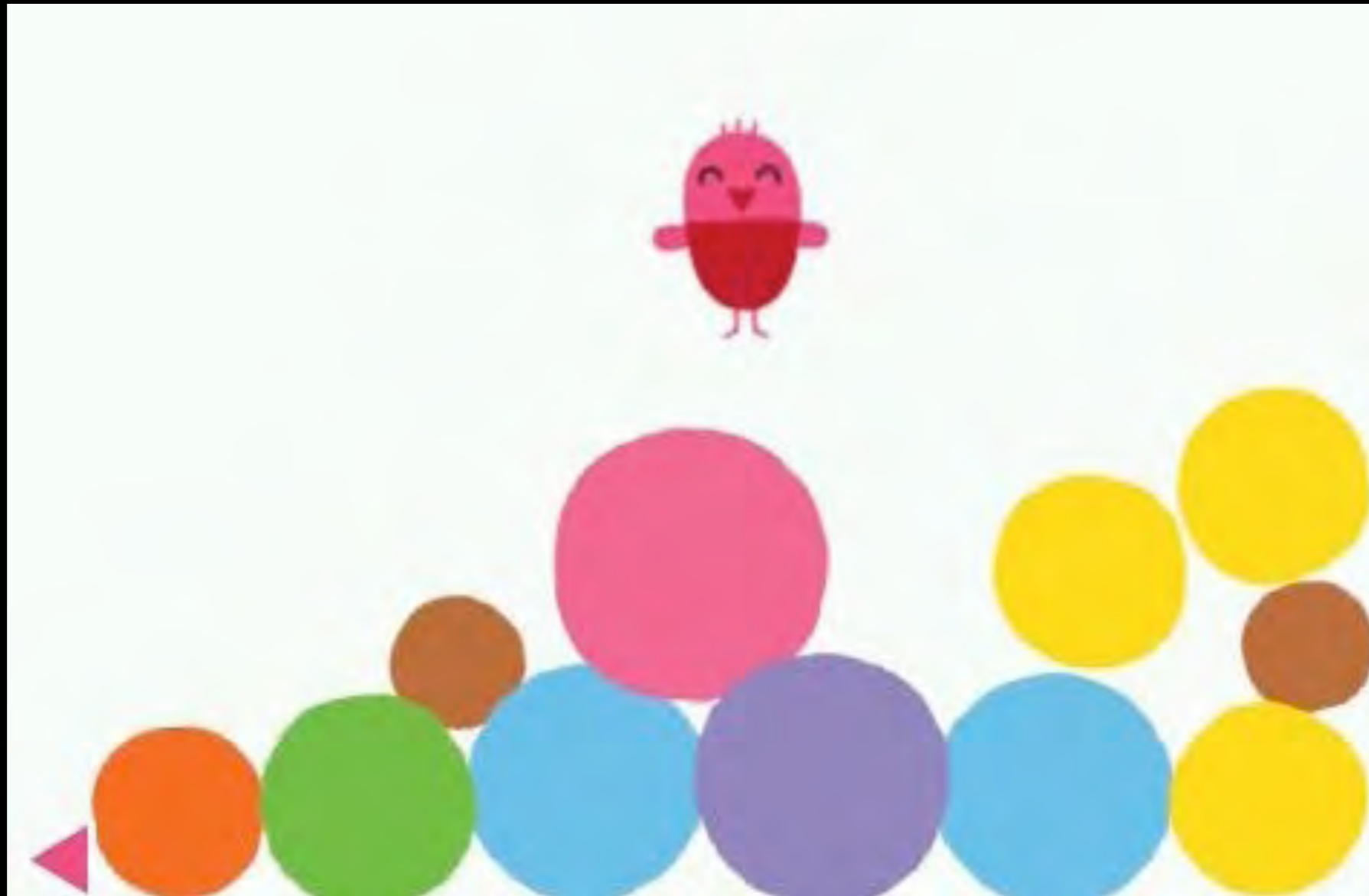
Preschool
3-to 5-Years

Tools for creative expression.

Offer a choice of easy-to-use, well designed apps and video games, on various platforms like the iPad, Nintendo DS, Leapster, MobiGo or iPod Touch.   Let them develop a sense of "I know how to make this work" through play.

Digital cameras

Keyboards

Bedtime stories.

Toontastic, $3, Launchpad Toys (iPad) being used by a preschooler

"No, no!" you say,
"that isn't right.

The pigs say OINK
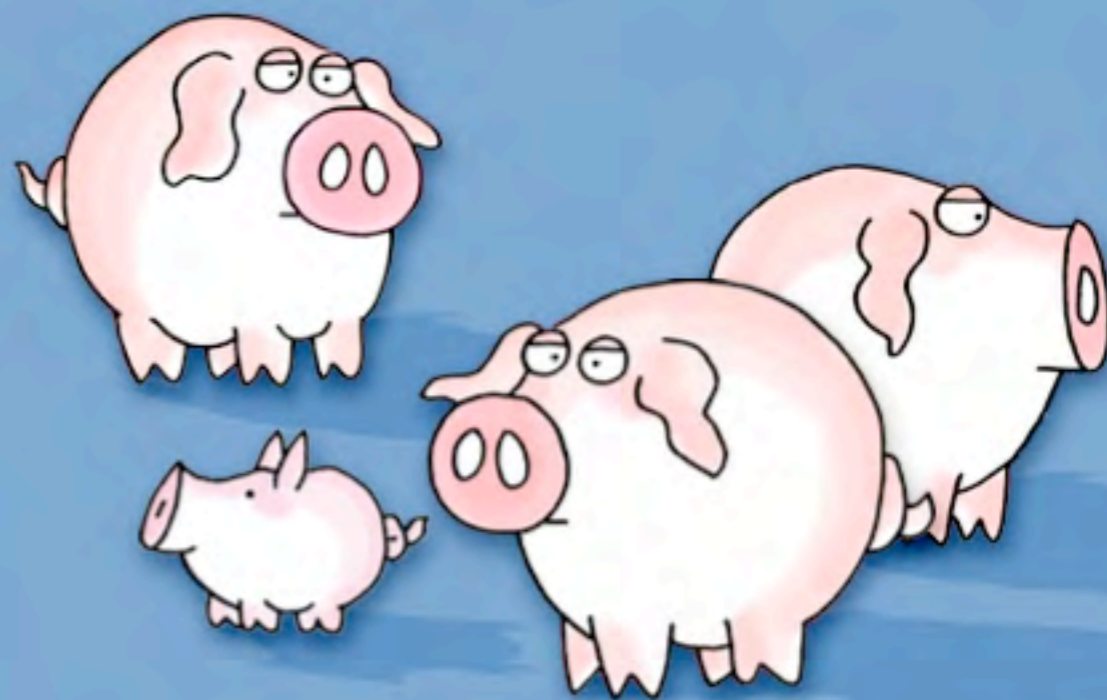
all day and night."
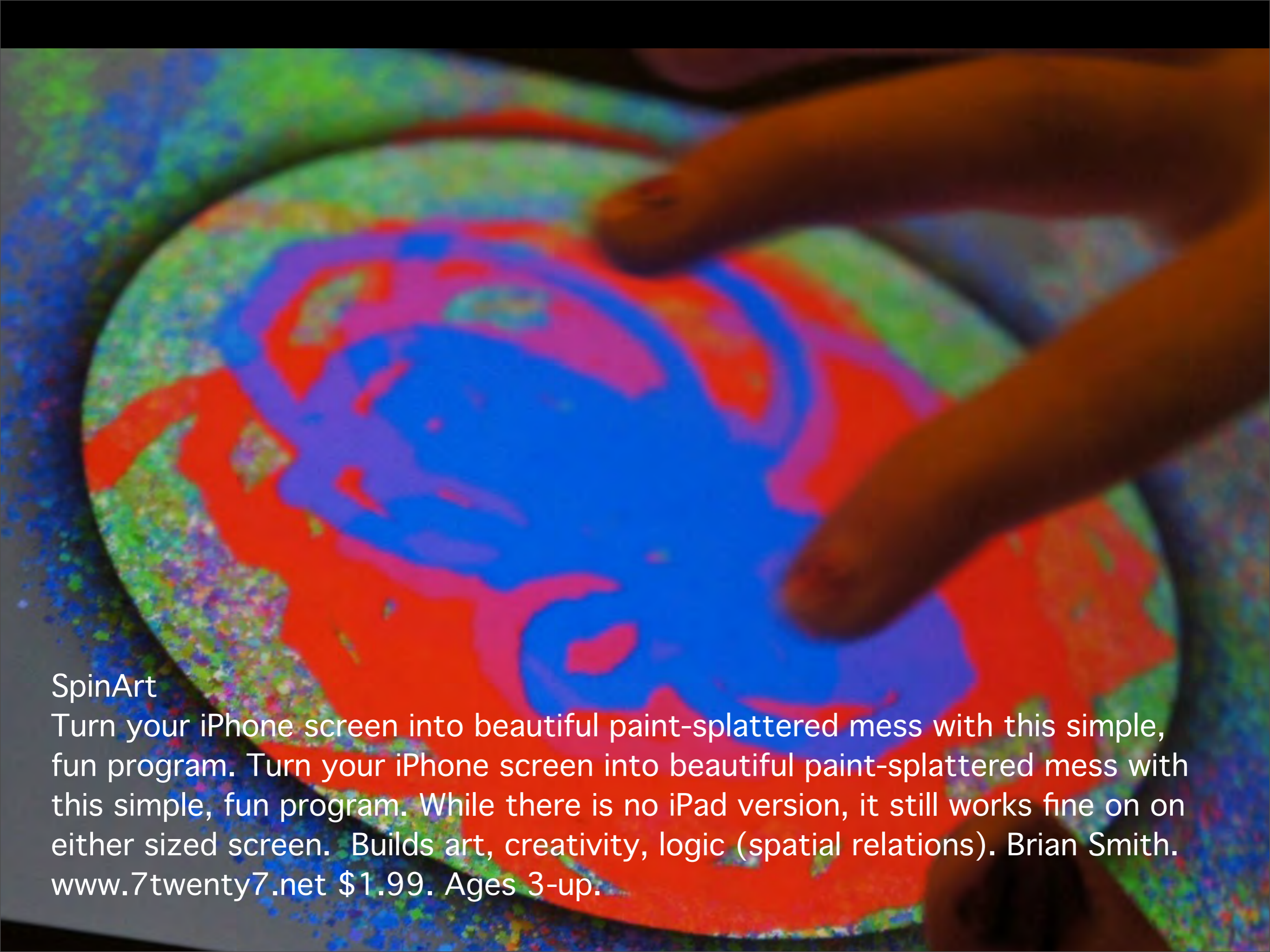
SpinArt
Turn your iPhone screen into beautiful paint-splattered mess with this simple, fun program. Turn your iPhone screen into beautiful paint-splattered mess with this simple, fun program. While there is no iPad version, it still works fine on on either sized screen. Builds art, creativity, logic (spatial relations). Brian Smith. www.7twenty7.net $1.99. Ages 3-up.

Early Elementary
5 to 9 Years

Search engines with filtering.

Social games like Pokémon.

A Wii, PS3 or Kinect, for social play.

A steady supply of fresh apps.

Technology to support emerging passions.

Upper Elementary
8 to 12 years

Programming experiences, like Scratch.

Cameras & video editing

Free, supervised access to a reliable laptop with a working browser, exposure to both Mac and Windows.

High doses of love and supervision.

Art Academy

Transforms your Nintendo DS into a sketch pad, complete paints and pencils. Step-by-step tutorials which introduce ideas like sketching, shading and perspective. If using on a Nintendo DSi you can use the built-in cameras to take pictures of the things you want to sketch. Builds drawing, painting. Nintendo of America. www.nintendo.com $20. Ages 8-up.
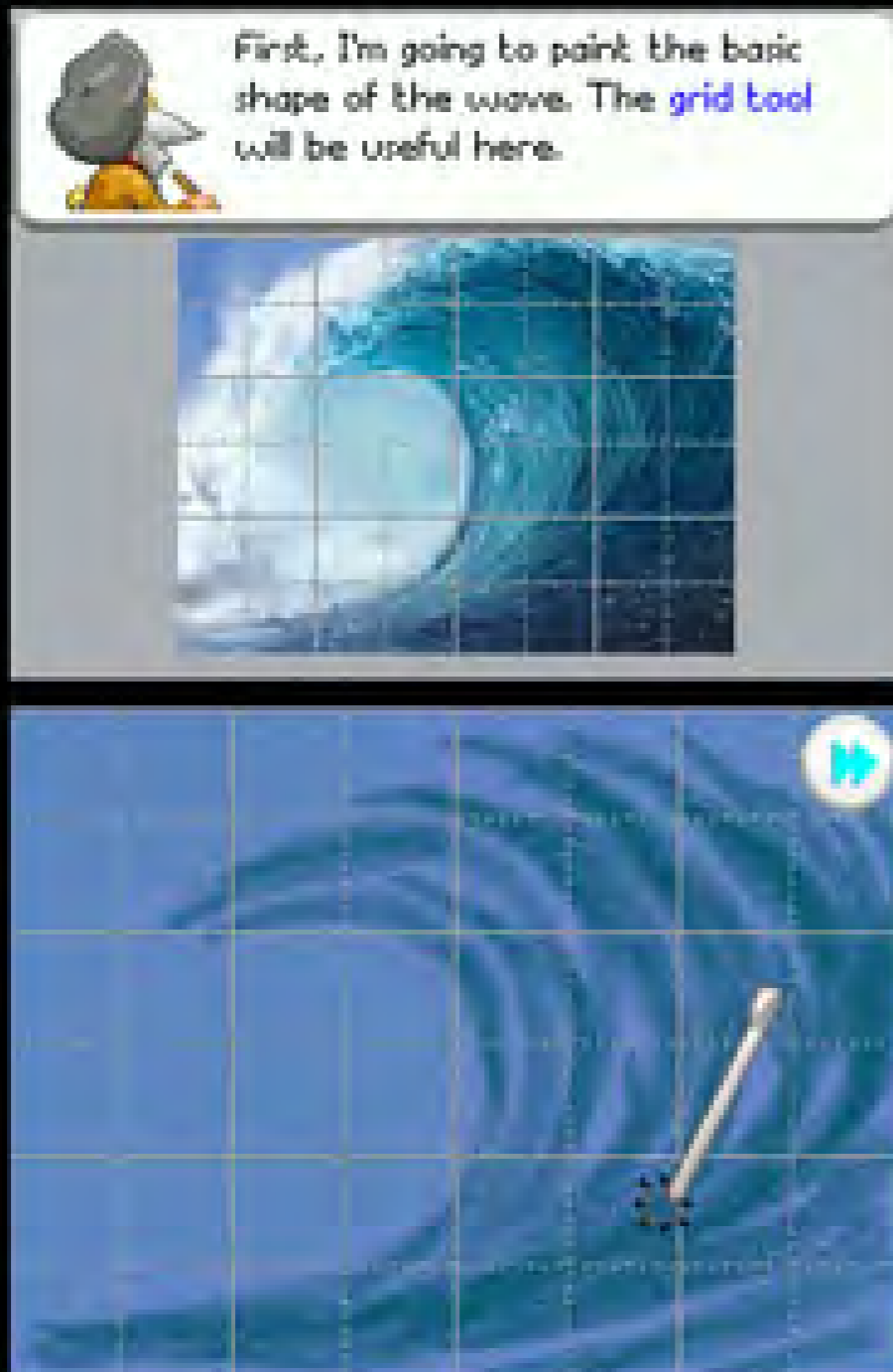
Teens
Ages 13-up

A smart phone w/video camera and if possible, a data plan.

Their own laptop.

Facebook/Twitter/email/Google

Video and photo editing, word processing.

Open all channels of communication, from smoke signals to SMS to Skype.

Access to emerging products.

Solar System

Builds science, astronomy, the solar system, planets. Touch Press. www.touchpress.com $14. Ages 7-up.

What is a screen?

Non Interactive
vs.
Interactive

David Kleeman
President, American Center for Children and Media

Posted: December 8, 2010 08:56 AM

"A Screen Is a Screen Is a Screen" Is a Meme
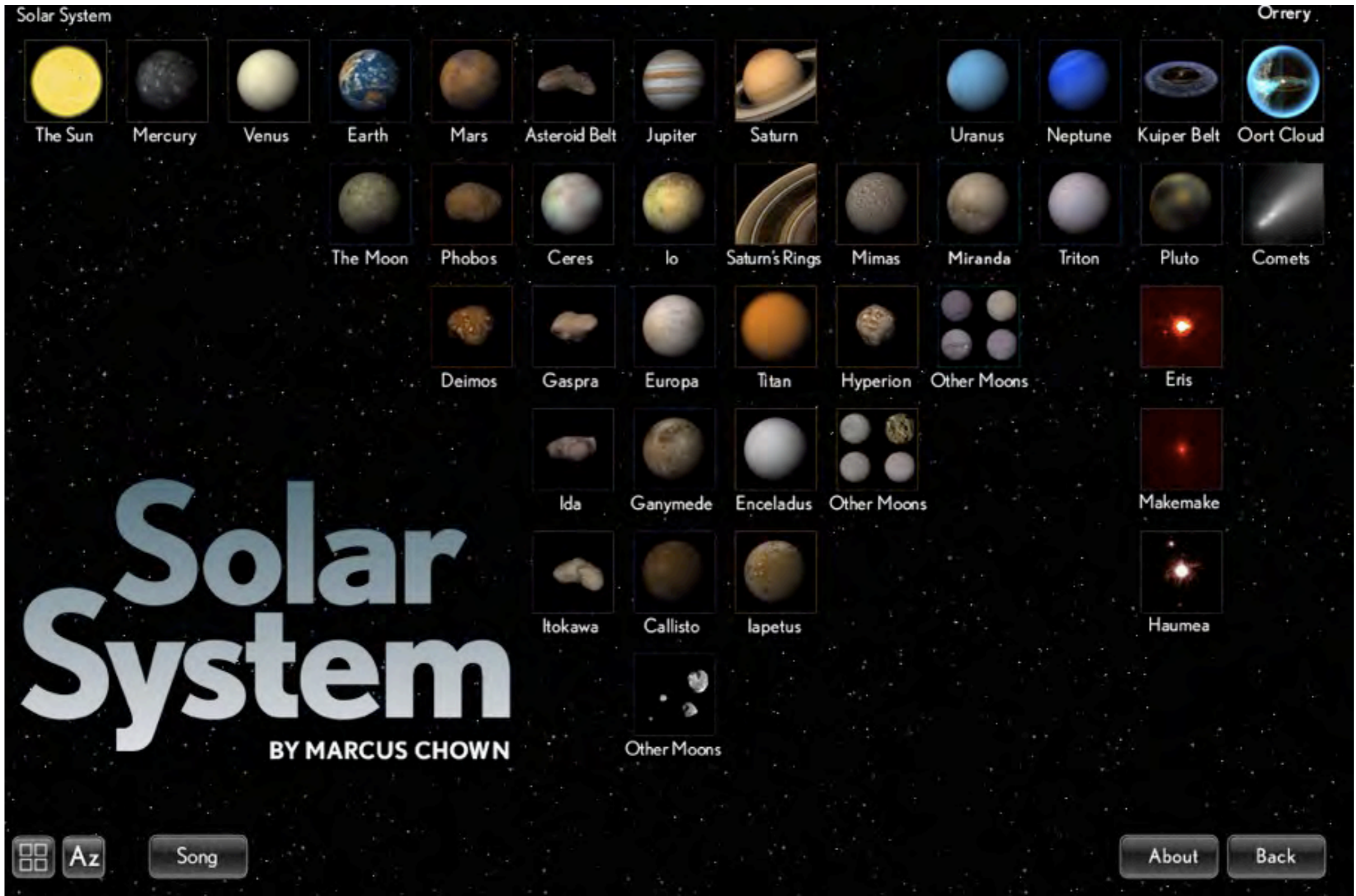
| Inspiring | Enlightening | Crazy | Scary | Helpful | Amazing | Innovative | Important |

Read More: Children , Content , Games , Internet , Ipad , Iphone , Media , Movies , Screen Time , Screens , Software , Television , Toddlers , Living News
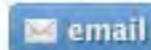
Children's television has been a playground for memes for as long as it's existed (much longer than "meme" has been a word!). Most are light and from pop culture -- from Davy Crockett coonskin caps to rumors of gay Teletubbies. Others grow from more dire murmurs about media's effects on children -- sit too close and you'll ruin your vision, short segments decrease attention span, digital kids can't write standard English.

Recently, I've noticed an emerging meme -- "a screen is a screen is a screen." This or similar phrases suggest that only total time matters in children's relationship with media, not what's being viewed or used by whom, nor how and why. As used, it's a facile way to tar all media and absolve parents or activists from doing the hard work of addressing specific content or context.

"The truth seems self-evident; all screens are not created equal."

The View from Moore's Law
An Amazing History!

Moore's Law Meets Literacy — Some Key Events

Source: Children's Technology Review database -- see complete references at
http://www.childrenssoftware.com/articles/history.tech.literacy.html

Accelerated Reader   Speech to text   iPad
Voice Recognition
Soliloquy Reader

Microsoft Office
Read180
Hyperstudio

TVs become HDTVs
PS3
Xbox 360
Nintendo Wii

WordStar®
Word Perfect®
Bank Street Writer
Mindstorms/LOGO

Pokémon

Google

CD-ROM

MMPGs

Living Books

Flash/Starfall.com

Reader Rabbit

Netbooks

IMing

Decline of
Educational
Software

iPod Touch
iPhone
Nintendo DSi
Tag/Tag Jr
Kindle

Internet

LeapPad

FLY Pen
Computer

Intel ClassMate

Dustin
Heuston
forms
WICAT

ECHO Speech
synthesizer

Leapster
Pixter

| O.K. Moore's Talking Machine |
| Fry Defends Teaching Machines |
| Porter Review: A Closer Look at Teaching Machines |
| Skinner's Teaching Machines |
| Bexley Study |
| World War II |
| WTR Released |
| The Microcomputer |

1940   1950   1960   1970   1980   1990   2000   2005   2008   2009 2011

iPad Effect

"Pillars" of the iPad:
1. Multi-touch
2. 10 hour batteries
3. Internet
4. 13,000 apps (an army of programmers)
5. stereo speakers
6. gyro and accelerometer
7. Oleophobic screen
8. $500 and up

"The iPad is the computer we always wanted."
Ann McCormick, Founder, The Learning Company
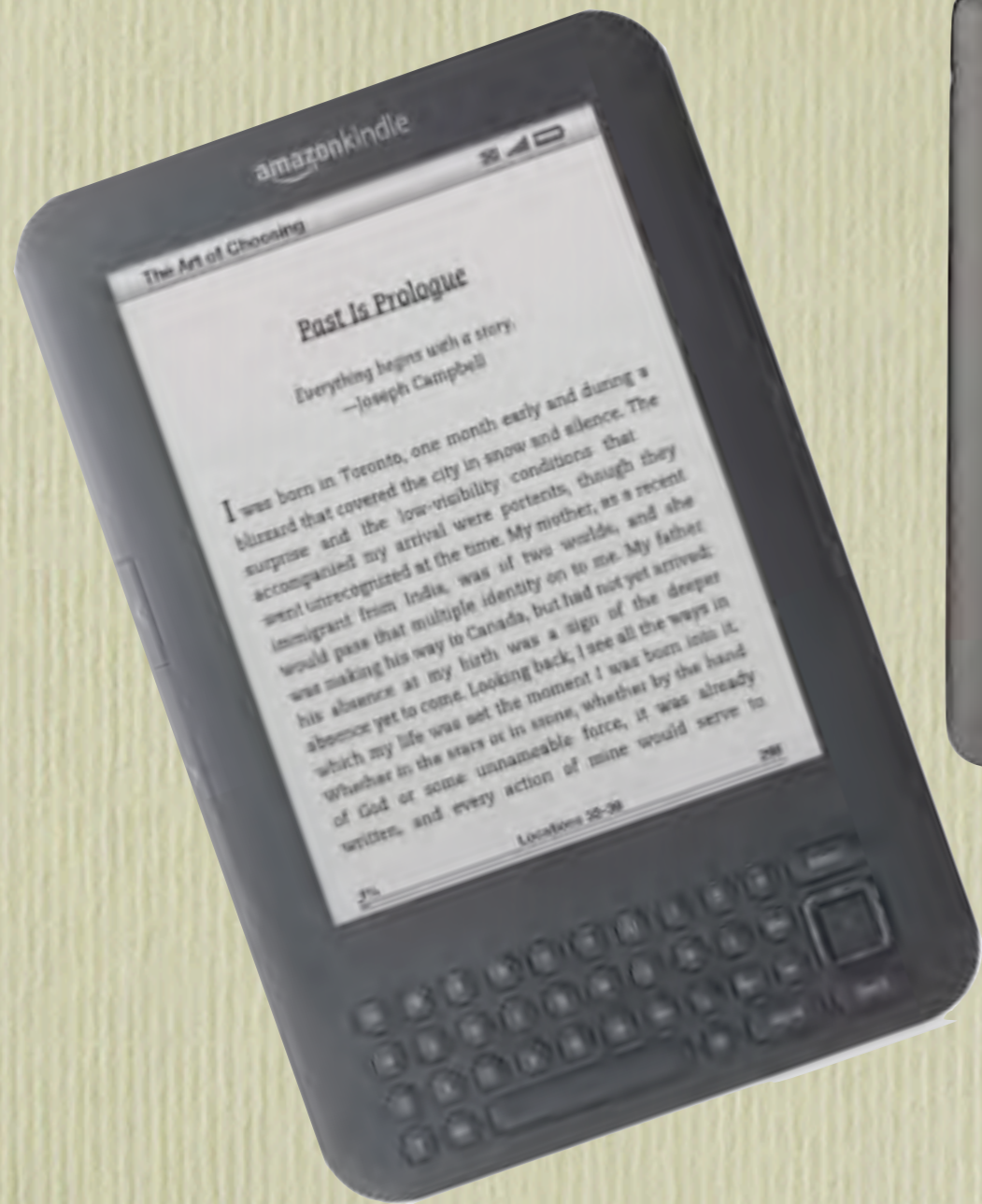
Kindle (Amazon)
Nook Kids (bn.com)
Sony Reader Pocket Edition

Beyond the Tablet

VTech
V.Reader

FLIPS The Bubonic Builders, Electronic Arts

Tag Reading System

Leapster Explorer
(coming this fall)

InnoPad from V.Tech (coming this fall)

Google's Android

Moterola XOOM (top)
Samsung Galaxy Tab (right)

Microsoft Kinect

"Taxonomy of Touch"

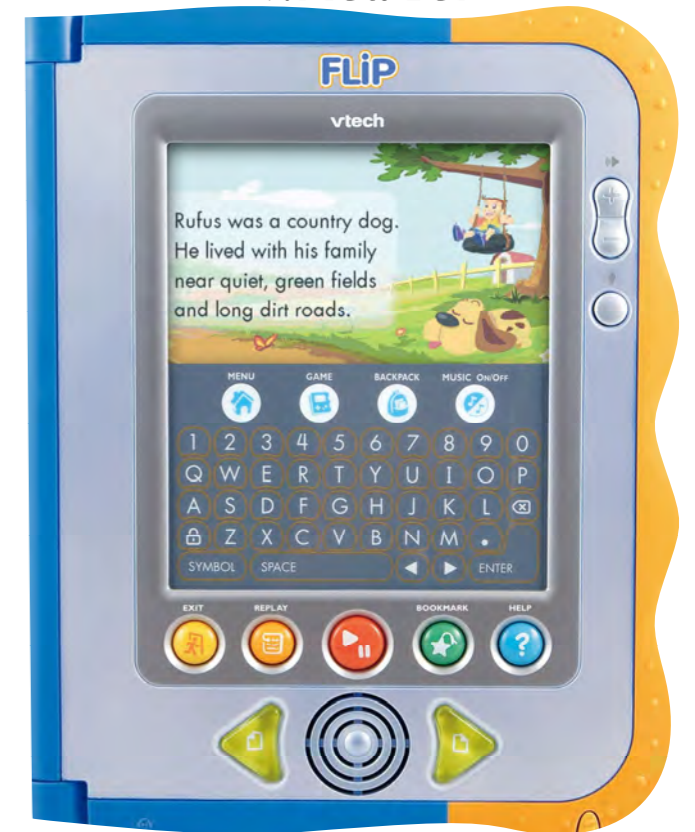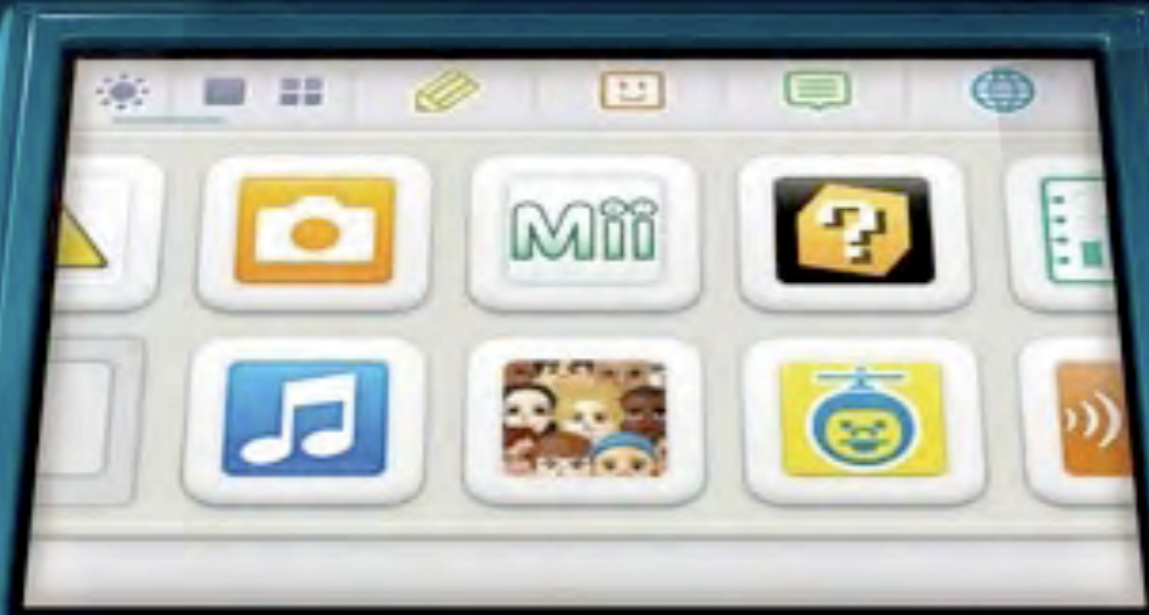**Table 1: A Taxonomy of Multi-Touch Interaction Styles, by Stage**

Age and Stage	Intentional Touch-Related Behaviors	Motion/Voice Behaviors	Examples
Birth - 24 months (Sensorimotor)	• Mouth • Bump/Swat • Kick • Jab/poke • Smear • Grasp • Swipe, dig or scoop • Swipe directionally (up, down, left or right), e.g., to turn pages or change photos. • Single tap/ single touch with coin-sized icons	• Jolt • Shake • Feel the vibration from the iPad's speaker • Rock • Blabber • Lean (whole body) • Sit • Throw • Single word commands	Look for apps that deliver high cause/effect ratios. These are also called "busy box" apps, "interactive play doh" or rattles. These experiences can empower a child, letting them bang on a keyboard http://bit.ly/bMgr2l, pop bubbles, or make waves in a pond. Show children where the "change app" button is, so they can get out of what they get into.
2 to 5 (Preoperational)	• Scribble http://bit.ly/aXqFur or finger paint. • Touch and use BB-sized icons • Slide objects (with thumb or finger) • Flick and throw (skeet ball, a shooting gallery) • Trace • Cut or slice • Alternate hands (e.g., on a piano keyboard) • Press and hold (e.g., as a timer fills) • Double tap	• Tilt to steer (like a steering wheel) • Align camera viewfinder	This is the age when a child's motor abilities start to catch up with his or her cognitive abilities. They can find and touch smaller icons, do dot-to-dot puzzles and control things by shaking or tilting the screen. They start to employ their emerging temporal and spatial thinking abilities in their iPad interactions.
5 to 12 (Concrete Operational)	• Spread out (with thumb and index finger, going in different directions) • Pinch in (with thumb and index finger) • Press soft, press hard • Rotate • Hit the target • Push a magnet (like herding cats) • Two or more combination movements, like tilt and shoot.	• Balance (tilt) like a plate • Jump to hop, while throwing a ball (with a tap).	By the time they are reading, children are ready to fully explore the iPad's multitouch screen, working in concert with the microphone and accelerometers. Prior experience will increase confidence.
12 - up (Formal Operational)	• Isometric rotation (both fingers move the same distance, in the same or opposite direction). • Simultaneous rotation, such as with a compass (hold thumb in one space, and rotate other finger). • Augmented reality camera based applications such as a virtual planetarium http://bit.ly/17w96B	• Children can start to use the compass, and conceptualize the accelerometer.	If your goal is to develop a proficient iPad user, provide plenty of exposure to a variety of apps.

See also: Yahoo's Nate Koechley's "Taxonomy of Touch" talk on slideshare
http://www.slideshare.net/natekoechley/taxonomy-of-touch

iPad Baby Mashup
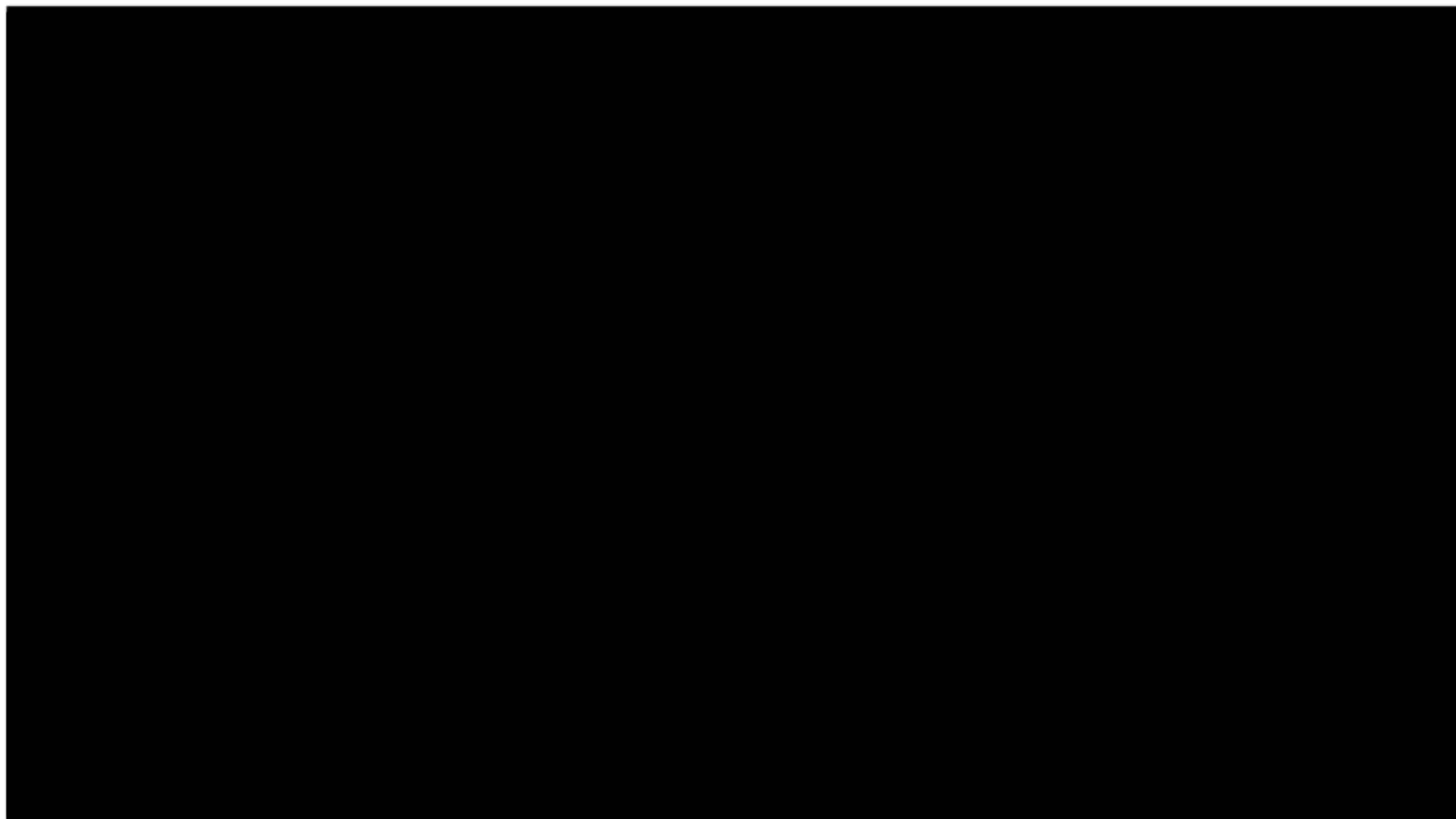
Symptoms of lower quality interactive media

Death Certificate

✓ Buggy
✓ Laggy
✓ Talks too much
✓ Evil

Dust

Draw a line to connect each product to its rating

My Baby Einstein App
Disney

Dinosaur Train Eggspress
PBS Kids

Wheels on the Bus
Duck Duck Moose
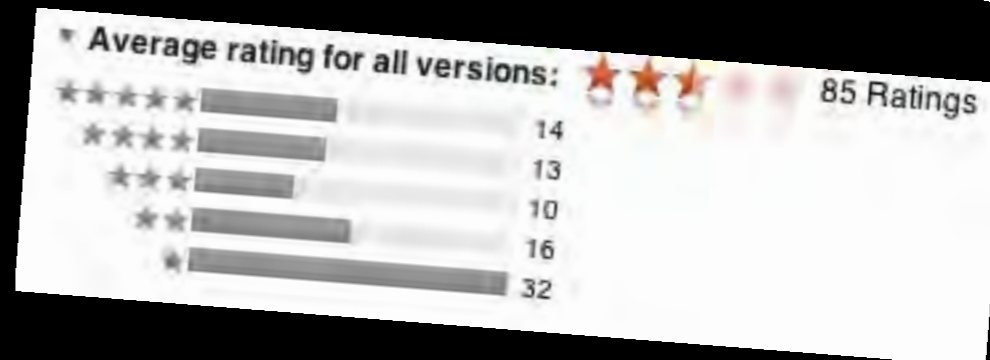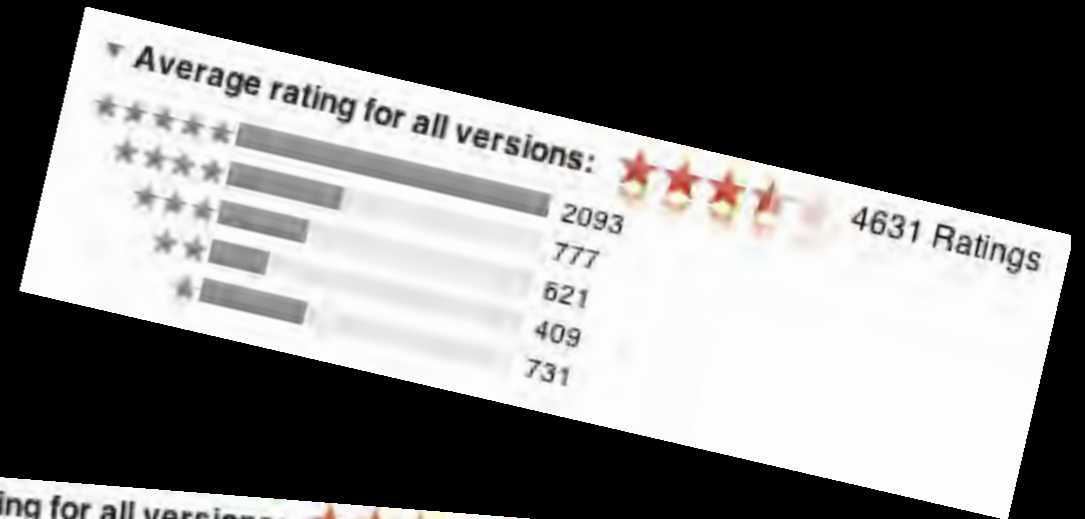
246 Ratings
Average rating for all versions:
64
34
22
26
100

Average rating for all versions:
2093
777
521
409
731
4631 Ratings

Average rating for all versions:
14
13
10
16
32
85 Ratings

Draw a line to connect each product to its rating

My Baby Einstein App
Disney, $3.99

→

Average rating for all versions: ★★★☆ 246 Ratings
★★★★★ 64
★★★★ 34
★★★ 22
★★ 26
★ 100

Dinosaur Train Eggspress
PBS Kids, $2.99

→

Average rating for all versions: ★★★☆ 85 Ratings
★★★★★ 14
★★★★ 13
★★★ 10
★★ 16
★ 32

Wheels on the Bus
Duck Duck Moose, $99

→

Average rating for all versions: ★★★★ 4631 Ratings
★★★★★ 2093
★★★★ 777
★★★ 621
★★ 409
★ 731

Dust 1. Buggy

crashes every time ★ ☆ ☆ ☆ ☆   Report a Concern ›
by missre523 - Version 2.0 - Apr 28, 2011

i really wanted this book for my kids, but it crashes on the first page every time,and wont let me see any other pages. 4 dollars wasted. How disappointing.

0 out of 1 customers found this review helpful   Was this review helpful? Yes | No

The lesson for publishers?
Don't release your cake before it is baked.
Reality test with people other than relatives.
Once your app is live, nip errors in the bud.

Dust 2. Laggy

Charley Harper's Peekaboo Forest
Night & Day Studios. $1.99

AKA Unresponsiveness
Lesson for publishers?
Keep it "crisp." If you put something on the screen that looks interesting, a child is going to want to touch it.

Pets are responsive

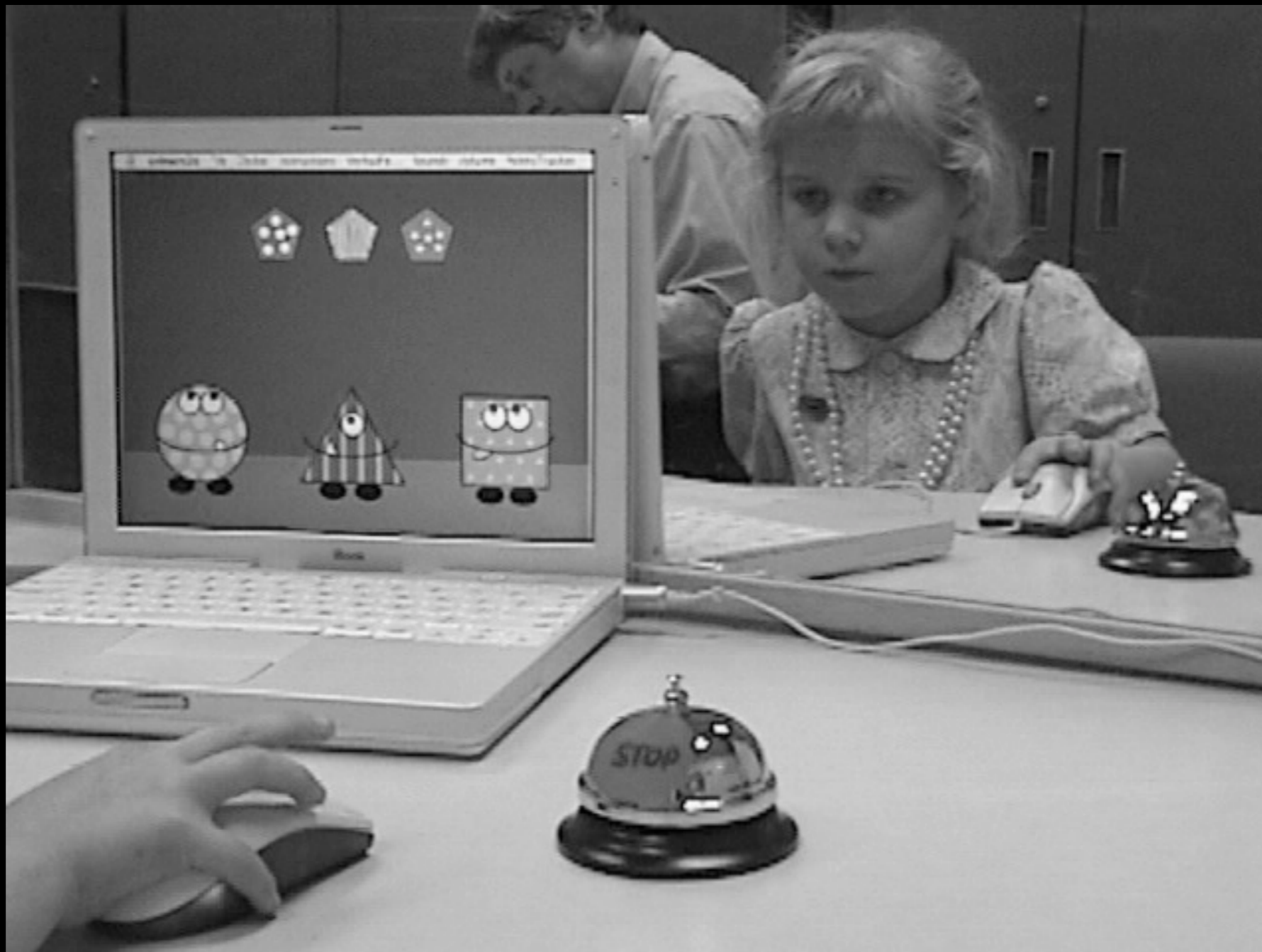Lesson for publishers?
Increased feelings of control increases engagement.

The HOME button has made children "app browsers."
A child's best friend, an app developers worst nightmare.

Dust 3. Talks too much

Buckleitner, W. (2006). Exploring the Relationship Between Software Interface Interaction Style and Child Engagement. Early Education & Development, Fall 2006.
Search on "buckleitner dissertation"

The Relationship Between Software Design and Children's Engagement

Warren Buckleitner
College of Education
Michigan State University

This study was an attempt to measure the effects of praise and reinforcement on chil-

Three times more tasks attempted
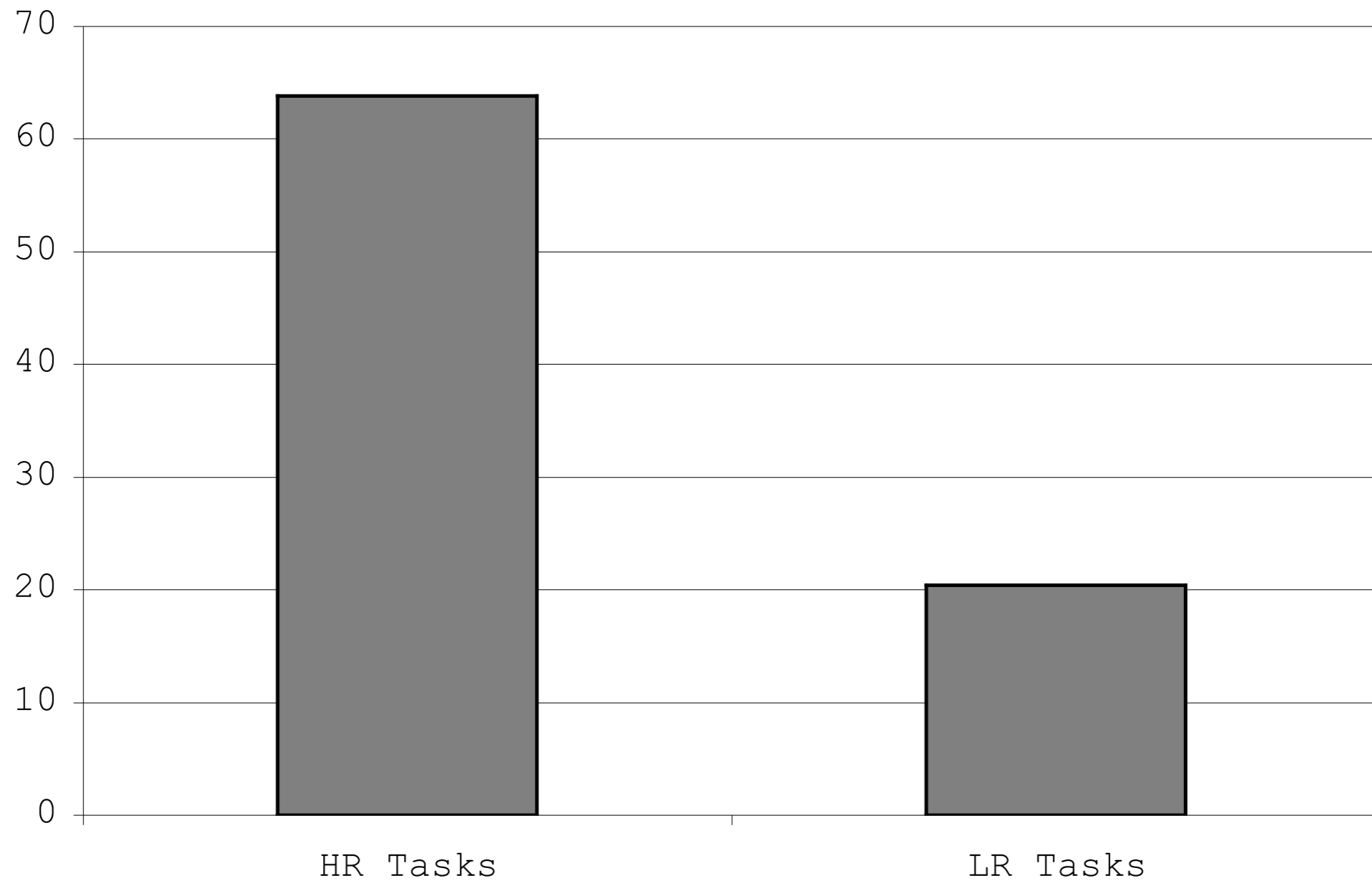
Twice the correct answers
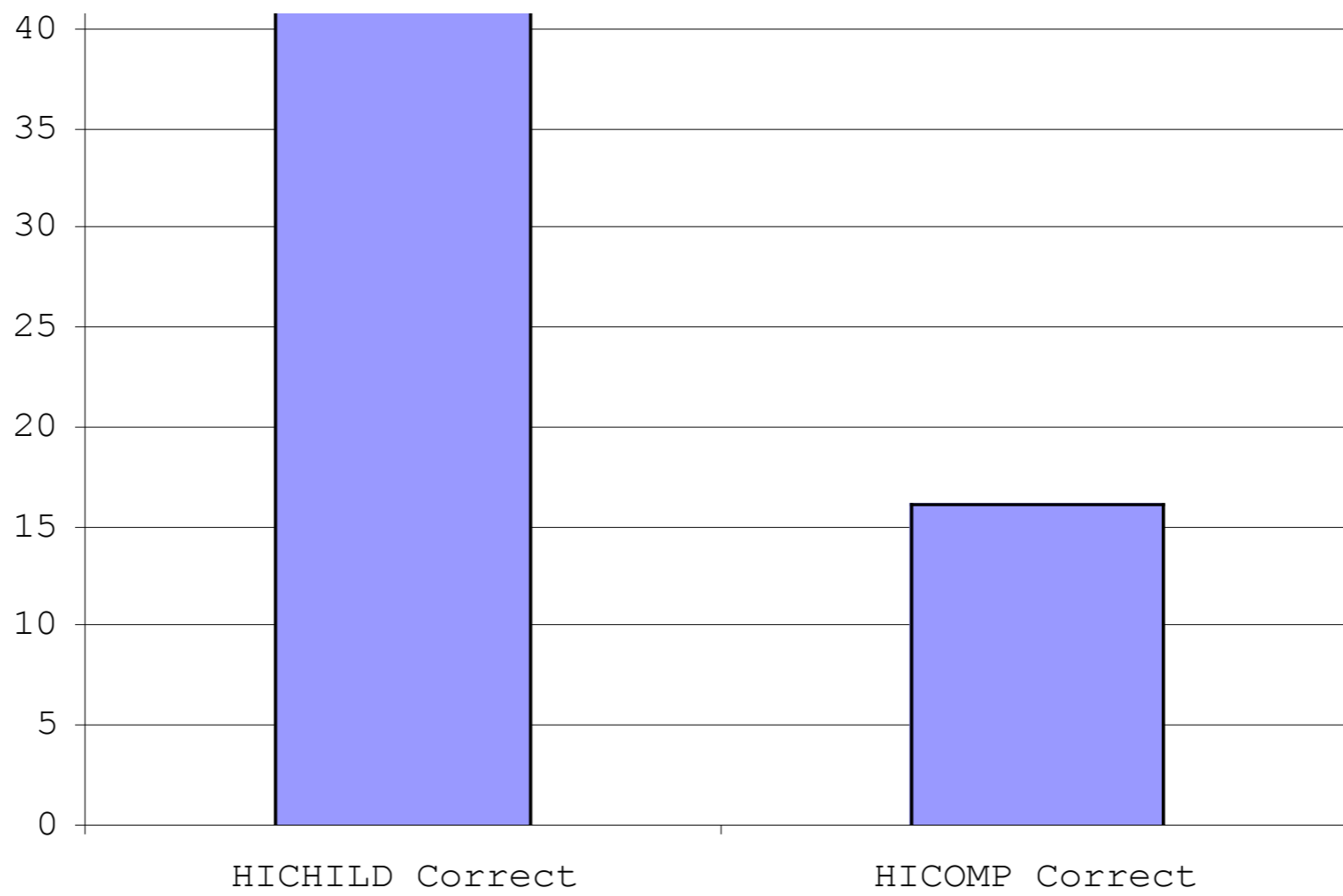
Dust 4. Evil

"The test of the morality of a society is what it does for its children." Dietrich Bonhoeffer, Theologian

100 | Dietrich Bonhoeffer Geboren 4.2.1906 Hingerichtet 9.4.1945 | Deutsche Bundespost

1995

What is "Evil" in children's IM?

1. Selling faster development, sans valid research.

2. Mixing commercial and educational agendas.

3. Turning young children into "page view mules."

4. Teasing with freemiums or velvet ropes.

5. Holding artwork, pets or coins hostage, until parents pay the ransom.

6. Taking advantage of a child for pure financial gain.

7. Exploiting children to make a funny video for YouTube

Top Grossing — See All >

1. Tap Zoo — Games — FREE
2. Zynga Poker — Games
3. Tap Pet Hotel — Games
4. Angry Birds — Games
5. Texas Poker — Games
6. Words With Friends — Games
7. MotionX GPS Drive — Navigation
8. Zombie Farm — Games
9. Smurfs' Village — Games
10. Angry Birds Rio — Games

"At Pocket Gems, We're Serious About Fun"

Pocket Gems develops free-to-play mobile games that are ridiculously fun. We were founded in 2009 by Daniel Terry and Harlan Crystal, engineers and gaming industry outsiders, who wanted to bring the excitement of social gaming to the mobile platform.

We have two missions:

- **Build the world's best mobile engineering team** – Mobile is the platform of the next decade and gaming will feature some of the most compute- and memory-intensive applications. We want to be the place to work for engineers who are as excited about pushing the limits of mobile hardware as we are. Think that sounds fun? So do we. Check out our jobs page if you'd like to work with us.
- **Become a global leader in the mobile entertainment industry** – Over the past 20 years, entertainment has evolved. What once existed only on the TV screen or computer monitor now fits in the palm of your hand. This platform enables experiences never before possible and represents the next wave of innovation in entertainment. Using a combination of creativity and analytics, we want to expand that frontier by delivering the most engaging mobile experiences available.

With recent funding by Sequoia Capital, we have the resources to be able to pursue these goals and build upon our successful track record.

Level 2
19/65

Grade
C

546

0

ZOO

3

In 3 minutes, collect revenue from your Gorilla.

1x

ZOO

3

Your Gorilla has Zoo Revenue ready to be collected.
Click the animals that have coins to collect money and experience.

1x

NURSERY

BACK

Would you like to unlock this nursery slot for 100 coins?

No   Yes

Tap the locked nest to unlock it, so you can breed animals.

1x

BACK

Nursery

Sea Turtle

Collect 8,048 coins and 651 xp every day

Need 2 to breed

1
star

Cross-Breedable

Gorilla (2 owned)

Collect 25 coins and 2 xp every 5 minutes

Breed in 1 minute

25
coins

Cross-Breedable

Crocodile

Collect 750 coins and 58 xp every 30 minutes

Need 2 to breed
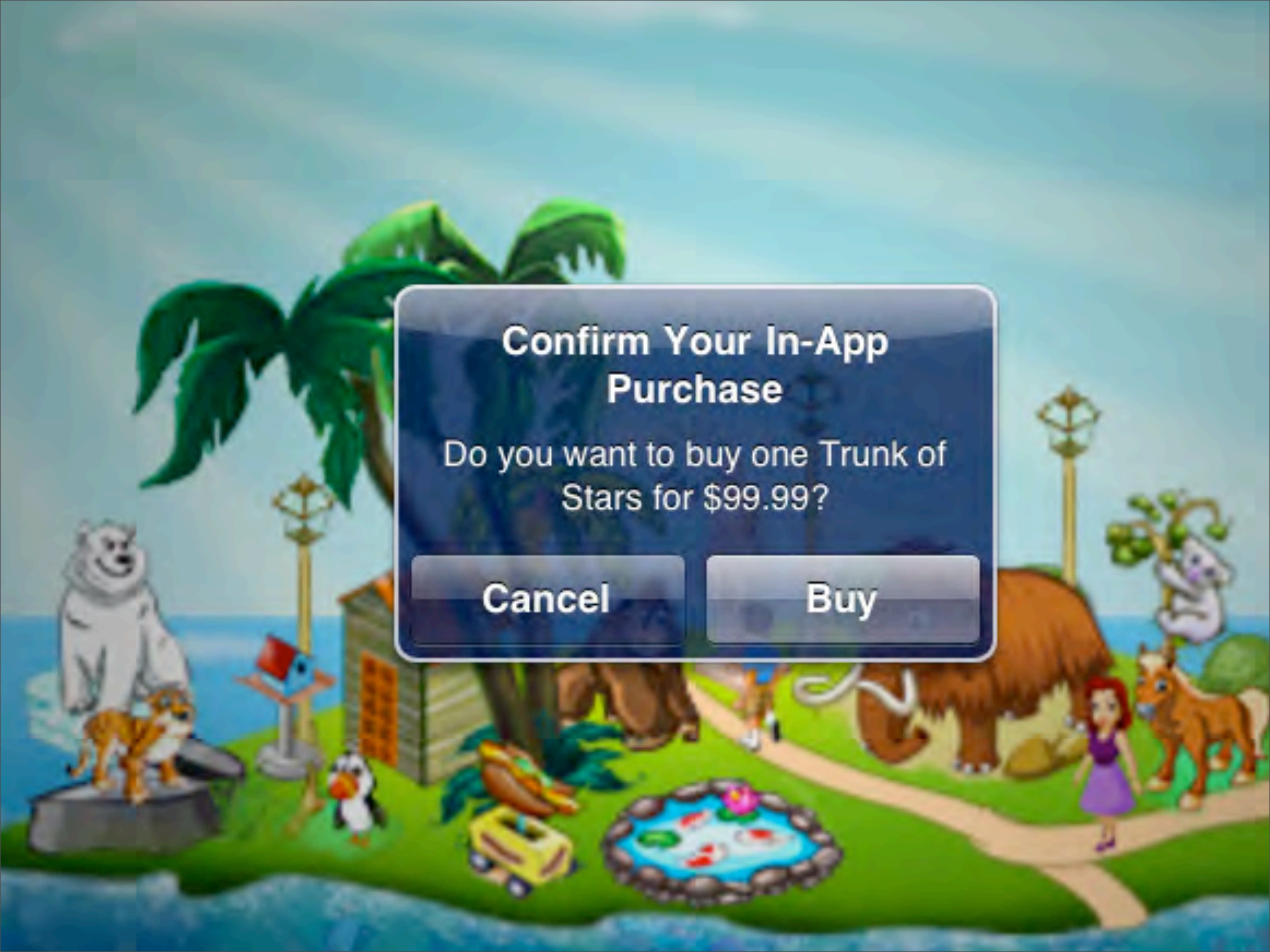
80
coins

Cross-Breedable

Mardi Gras Penguin

Collect 1,800 coins and 110 xp every 4 hours

Experience Level 2 required

1
star

1x

Confirm Your In-App Purchase

Do you want to buy one Trunk of Stars for $99.99?

Cancel | Buy

Evil game! ★☆☆☆☆

by Gffhddyf - Version 1.7 - Apr 6, 2011

Addicting, but not very fun at all. Your wallet will be empty within a day of this game. You can barely do a THING without money. Maybe when the creator of this game makes this less money-sucking and actually fun, I will redownload it. Don't see that happening though...

43 out of 51 customers found this review helpful

Was this review helpful? Yes | No

Cecilia Patino 5 months ago

Accidentally charge.

🙁 I'm frustrated

my 6 years old son accidentally bought a trunk of coins I didn't authorize because there was no password required.and because i doesn't know how to read made that purchased. please help me recover that money I need it for my utility bills.

👍 0

f Like

Tweet

Link

58 PEOPLE HAVE THIS PROBLEM

+1

follow

inappropriate?

---

michelle.sg1 4 months ago

inappropriate?

Oh my god, my nephew just charged over $2000 US worth of Tap Zoo crap in a matter of a couple of days! He had no idea what he was doing. Sister is currently in touch with Apple. This game is ridiculous. She left a review on iTunes just describing what happened and it never appeared. Something is going on here.

⭐ good solution!

A Code of Ethics for the Publishers of Interactive Media for Children (http://dustormagic.wikispaces.com)

- **I won't sell development**, e.g., "smarter, brainy kids," without references.
- **I won't hold a child's work hostage**, as an incentive to renew a subscription or purchase an additional product.
- **I'll understand the difference between informing and selling**, especially when embedding brand names or when dealing with the public school system.
- **My product or service will treat every child the way I'd treat my own.**

Evaluation Instrument for eBooks

Children's Interactive Media Evaluation Instrument, Adapted for Ebooks

KEY: A = Always, equals 1 point. SE = some extent = .5, N = never, or 0 points. NA means "not applicable"

I. EASE OF USE (Can a child pick it up and make it work? Does it enhance feelings of control?)

A SE N NA

1__ __ __ __ The experience starts quickly with a minimal introduction that can be skipped.

2__ __ __ __ There is an obvious path to the first page.

3__ __ __ __ The experience feels crisp and responsive, enhancing a child's feelings of control.

4__ __ __ __ Pages are easy to turn or flip, forward or backward.

5__ __ __ __ Page turn icons are easy to spot.

6__ __ __ __ A "return to main menu" icon is easy to spot.

7__ __ __ __ It is easy to jump to another page, anywhere in the ebook.

8__ __ __ __ If there is a "read to me" mode, it is easy to stop and get back to the main menu to turn it off (you don't feel trapped).

9__ __ __ __ It is easy to adjust the sound.

II. EDUCATIONAL VALUE (What does the child walk away from the experience with, that he/she didn't have when he/she came to the experience?)

1__ __ __ __ Embedded reinforcements are used, to support the story or the learning.

2__ __ __ __ The challenge level can be adjusted.

4__ __ __ __ Games and animations support the story.

5__ __ __ __ Language enrichment techniques are used.

6__ __ __ __ If the title is a reference, there is an index and the ability to search by keyword.

7__ __ __ __ A child can record their own narration.

8__ __ __ __ Labeling is clear and directly linked to the finger touch.

9__ __ __ __ There are ways for a child to represent their experience, e.g., through creative expression.

IV. ENTERTAINMENT VALUE (How "fun" is the experience?)

1__ __ __ __ Hot spots provide surprises.

2__ __ __ __ Children will want to return to the experience.

3__ __ __ __ There's enough content to keep a child interested.

4__ __ __ __ There's enough challenge.

V. FEATURES (Consider the current "state of the art" in children's ebook design)

1__ __ __ __ Fonts are easy to read.

2__ __ __ __ Text is narrated, and if possible, sounded out.

3__ __ __ __ Bookmarking is used, so a child can come back the same point where he/she left off.

4__ __ __ __ It is possible to save your work.

5__ __ __ __ Language translation features are available.

6__ __ __ __ Sounds, such as page flips, can be turned on or off.

7__ __ __ __ It is easy to flip a page forward and backward.

8__ __ __ __ You know how "thick" the "book" is. There is some indication of how many pages are in the book, or how long the story is.

9__ __ __ __ Music can be easily toggled on/off, and doesn't invade a child's imagination.

10__ __ __ __ In-app sales, if used, can be locked away from a young child.

11__ __ __ __ External links are limited to the "about us" menu.

12__ __ __ __ Credits identify the publisher, author, narrator and producing studio, along with a physical address and valid contact information.

IV. VALUE (Rate the ebooks value, comparing competitive products)

1 = Low   10 = High

__ __ __ __ __ __ __ __ __ __
1 2 3 4 5 6 7 8 9 10

Buckleitner, W., (2011). Children's Interactive Media Evaluation Instrument, Adapted for Ebooks. Children's Technology Review, January 2011, Vol 19, Issue 130.

http://childrenstech.com.

To help you remember

Elements of Quality

Easy to use

Makes you feel powerful quickly -- starts quickly, responsive, reversible, Minimum User Competency (MUC) is below child's developmental level, can jump around between pages, over the shoulder help, minimal or no instructions

Educational

You walk away with something valuable; a skill or competence you didn't have when you came to the experience.

- language
- math/logic
- art/music
- science
- social
- geography

Entertaining

Challenging, novel, full of discoveries, social

Features

Preferences let you customize. If it is free, you can lower your expectations.

Value

What does it do vs. how much does it cost?

"False Choice"

A false dilemma (also called false dichotomy, the either-or fallacy, fallacy of false choice, black-and-white thinking or the fallacy of exhaustive hypotheses) is a type of logical fallacy that involves a situation in which only two alternatives are considered, when in fact there are additional options. (per wikipedia)

Technology is bad, so if you use it with children you're also bad.

So if you don't use technology with young children, you're good.

Education is full of false dichotomies.

Whole language vs. phonics
Constructivism vs. behaviorism

The reality?

You can find both dust and magic, and there are many shades of gray.

A great place to start….

Technology in Early Childhood Programs
Serving Children from Birth through Age 8

A joint position statement of the National Association for the Education of Young Children and the Fred Rogers Center for Early Learning and Children's Media at Saint Vincent College

Proposed 2011

It is the position of NAEYC and the Fred Rogers Center that technology and interactive media are learning tools that, when used in intentional and developmentally appropriate ways and in conjunction with other traditional tools and materials, can support the development and learning of young children.

In this position statement, the word "technology" is used broadly, referring to interactive digital and electronic devices, software, multi-touch tablets, technology-based toys, apps, video games and interactive (nonlinear) screen-based media. Technology is continuously evolving. As a result, this statement focuses on the principles and practices that address the technologies of today, while acknowledging that in the future new and emerging technologies will require continual revisions and adaptation.

The most effective use of technology in an early childhood setting involves the application of tools and materials to enhance children's learning and development, interactions, communication, and collaboration. As technology increasingly finds its way into mainstream culture, the types and uses of technology in early childhood programs have also expanded dramatically to include computers, tablets, e-books, mobile devices, handheld gaming devices, digital cameras and video camcorders, electronic toys, multimedia players for music and videos, digital audio recorders, interactive whiteboards, software applications, the Internet, streaming media, and more. These technologies are increasingly expanding the tools and materials to which young children have access both in their homes and in their classrooms, affecting the ways in which young children interact with the world and with others.

http://www.naeyc.org/positionstatements/technology

This is not a "mandate."

Nowhere does it say you have to use technology.

Can we agree?

1. Technology is here to stay.
2. You can raise a happy, healthy child sans technology.
3. Technology has strengths and weaknesses that we need to understand.
4. We tap the power, maximize the strengths and minimize the weaknesses.

BALANCE

Use it to further your goals, and help you with the very hard task of working with young children.

- Join the NAEYC technology interest forum.

- Read the position statement: http://www.naeyc.org/positionstatements

- http://ecetech.wikispaces.com

- http://www.techandyoungchildren.org/

- Meet the "four 'B's" at NAEYC!

- Assignment: Rate 10 versions of the 3 Little Pigs

Sharpen your your ability to assess quality

1. Find an iPad
2. Search "Three Little Pigs" in the iTunes Store
3. Download 10 versions
4. Rate them from "don't like" to "like"

Let's Review

- What is the false choice?

- How is a child like a tree?

- Too much technology can _____ the roots.

- What are some real fears about technology?

- Name four ways to reduce the quality of an interactive experience

- What five factors do you use to rate children's IM?

- What makes a children's technology product "evil?"

Thanks!