Ten Affordances of Multi-Touch

Every Early Educator Needs to Know

by Warren Buckleitner

This presentation was first given in Minot North Dakota on February 12 2012 by Warren Buckleitner. These slides are the outline; demos and commentary on each app or game are given, depending on the time. This list is not cast in stone; apps and “affordances will continually change. The word “affordance” was originally invented by the perceptual psychologist J. J. Gibson (1977, 1979), per Don Norman
Inclusion in this presentation is not necessarily a recommendation.
What can I turn this finger into?
iPad Effect (Revisited)

Nine “Pillars” of the iPad
1. Multi-touch (11 simultaneous touch points)
2. 10 hour batteries
3. Internet
4. ~43,000* apps for kids (and an army of programmers)
5. Clear speakers
6. Gyro, accelerometer
7. Oleophobic screen
8. Two cameras (eyes), microphone (ears)
9. Affordable: $500

“The iPad is the computer we always wanted.”

Ann McCormick, Founder, The Learning Company

(born May, 2010, Cupertino, CA)
Father: Steve Jobs (deceased)
* CTR rough estimate
Polaroid Kids Tablet $150

Kindle Fire HD $200

iPad Mini $330

Play MG
Amplify Tablet

A WiFi-only Amplify Tablet will set schools back $299 apiece, so long as you agree to a two-year subscription to Amplify's services at $99 a year.
App Integration
With toys and books

ArtSee Studio
WowWee
USA, Inc. $40.
Ages 3-up.
Guided Access keeps the iPad in a single app, and allows you to control which features are available. To start Guided Access, triple-click the Home button in the app you want to use.

Set Passcode

Set the passcode used when Guided Access is enabled.

Enable Screen Sleep

The screen will dim after a period of inactivity. Pressing the Sleep/Wake button will put the screen to sleep immediately.
Ten Affordances of Multi-Touch
Survey Method

Start with CTR’s “Editor’s Choice” titles. (rating > 4.2) n = 1020

Scroll through, and ask “what does it let a child do?”
Ten Multi-Touch Affordances for Children

1. I’m curious; tell me more (nonfiction)
2. Tell me a story (fiction)
3. Let me tell the story (recording, writing, video)
4. I’m inside the screen! (augmented reality)
5. Help, please (scaffolding, text-to-speech & tutors)
6. I want to play with friends (interpersonal play)
7. Let me drive! (virtual manipulatives)
8. How am I doing? (formative feedback)
9. I’m bored! (give me a challenge!)
10. Let’s make a mess!
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I’m curious

• ABC Farm (Peapod Labs)
• IBM Think
• Bats! Furry Flyers of the Night
• The Pyramids, Gems ($14, Touch Press)
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10. Let’s make a mess!
Let me tell a story

• Four Little Corners
• Voyage of Ulysses (Elastico Srl)
• Monster’s Socks
• War Horse (Touch Press)
• Rounds Franklin Frog
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Bologna Ragusa Digital Award 2013

**FICTION**

Four little owls
Rita the lizard
Houder’s socks

**NON FICTION**

War Horse
Endless Alphabet
Roundels: Frankling Frog
Prize at a glance

• “Narrative driven interactive media.”
• 242 entries, 32 countries
• 2012-13 copyright
• Any publisher, any country, no fee
• Any platform
• Deadline for 2014, February 1
• 4 Jurors, 1 vote
Report from the Jurors

André Letria, Children’s Book Illustrator (Portugal),
Chris Meade, Director of if:book (UK)
Cristina Mussinelli, Italian Publishers Association (Italy).
Warren Buckleitner, Editor of Children’s Technology Review (USA)
“How not to make an ebook.”
At www.dustormagic.com/ebooks
Why it didn’t win...

• Clumsy design: e.g., pages flip in the wrong direction.
• Not responsive.
• I’ve seen this before. This design was clearly influenced by Toca Tea Party with no attribution.
• Good story, amazing graphics, but it is hard to operate the catapult.
• Instructions are confusing and unnecessary.
• Loads too slow.
• Background music loops, over and over and over again.
• Crashed.
• Starts with a wordy introduction.
• Contains ethnic stereotypes.
• Evil. This is a “free” catalog designed to tease children, and trick them into an in-app sale.
• Contains links to web content in the main menu.
• Feels like a template, with sprinkled hotspots
• Not reversible.
• Asks you to rate this app before you play it.
• Pages get turned accidently.
• Lots of beautiful looking art that just sits there.
• Yet another page-flipper.
• Clunky mechanics get in the way of the narrative.
• Horrible narration.
• Ending makes no sense.
• Who made this? The author/illustrator/publisher are not clearly identified.
2013 Bologna Ragazzi Digital Winners

• Bats! Furry Fliers of the Night, $2.99, by Bookerella, USA
• Endless Alphabet, $free, by Callaway Digital Arts, USA
• **Four Little Corners**, $2.99, by DADA Company, Spain
• IdentiKat, $0.99, by Lastrego & Testa Multimedia S.r.l., Italy
• Monster’s Socks, $2.99, by Martin Hughes, UK
• Rita the Lizard, $2.99, by Irene Blasco Studio, Spain
• Rounds: Franklin Frog, $4.99, by Nosy Crow, UK
• Voyage of Ulysses, The, $3.99, by Elastico Srl, Italy
• **War Horse**, $13.99, by Touch Press, UK
• Where Do Balloons Go?, $5.99, by Auryn, Inc., USA
Let me tell the story

• Draw & Tell HD
• Disney Digital Books
• Sofia the First
• Oceanhouse Media’s Record your own narration
• DoodleCast for Kids
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Dr. Chip Donohue, Ph.D.
Director TEC Center, Erikson Institute
I’m in the screen

- Mask Jumble Animals (Pi'ikea Street)
- Imag-in-o-tron (Moonbot Studios)
- Toca Tailor
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Help please (teach me!)

- Bugs & Numbers
- LetterSchool
- Noodle Words
- I Am Alaska
- Trains by Byron Barton
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I want to play with friends!

- Kindoma
- Endless Alphabet (Calloway Digital Arts)
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Let me drive

- Toddler Maze
- Play 123
- More trucks
- Sort & Stack
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How Am I Doing?

- Go Go Games
- LetterReflex Jr.
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Challenge me

- Sort and Stack Toys
- Cut the Rope
- Temple Run
- Where is Perry/Water
- Flow
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10. Let’s make a mess!
Make a mess...

- Play 123
- Toca Band
- Toca Hair Salon/ Tea Party
- Foldify
Thanks!
About me (Warren Buckleitner)

- One of six kids, grew up and taught in Michigan, live in NJ
- Former Sr. Consultant, High/Scope Foundation
- Former teacher (elementary, college and preschool (yes, I made snacks)).
- Founding Editor of *Children’s Technology Review*
- Married, two daughters.
- One of many who advised on the NAEYC position statement.

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[http://childrenstech.com/files/2011/05/g3-1.pdf](http://childrenstech.com/files/2011/05/g3-1.pdf)