ECE Tech Trends in 2013 and New Directions for 2014- A TEC Conversation with Warren Buckleitner

Presenters

• Dr. Warren Buckleitner, Editor, Children's Technology Review

Date: November 13, 2013 2:00 PM Eastern Time

This session is part of the TEC Track Series of Webinars sponsored by the TEC Center at Erikson Institute - an innovative online community dedicated to the effective, appropriate, and intentional use of technology and interactive media as tools with young children.
Technology Trends in Early Childhood Education

2014

~ with ~
Warren Buckleitner as Johnny Carson
~ and ~
Chip Donohue as Ed McMahon
4 B’s Will Buzz @ NAEYC
Thursday Nov. 21
1:00 to 2:30 PM
East Salon B

<table>
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<tr>
<th>Presentation Title</th>
<th>Presenter</th>
<th>Topic Track Category</th>
<th>Age Group</th>
<th>Day and Time</th>
<th>Meeting Room Name</th>
<th>Site</th>
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<tbody>
<tr>
<td>Showcasing transformative technologies: Empower learning with innovative tools</td>
<td>Mark Bailey</td>
<td>Technology &amp; Young Children</td>
<td>All Children</td>
<td>11/21/2013 1:00 PM - 2:30 PM</td>
<td>East Salon B</td>
<td>Washington Convention Center</td>
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</table>
What would Ben Say?
Agenda

1. What do we know? (Chip)
2. Trends: Chicken and Egg
3. Top down vs. bottom up
4. Three stages of multi-touch implementation: some DAP staff development suggestions

NUTS AND BOLTS
5. Making a Mini Jumbotron
6. Some magical apps
What do we know?

- The use of the media depends greatly on children’s interests and needs, and families’ needs, backgrounds, languages and cultures — the context for individual child development and the family media ecology matter.

- Providing access to quality media and quality media environments requires engaging parents in a diversity of settings, including public libraries — Home, formal and informal settings matter.

- Young children are capable of creating their own messages and expressing themselves through the media — how control and the progression from consuming media to making and taking to creating media matters.
Simple relationships

64,000 Minutes of Childhood

Hardware

Software

Many images stolen from Google images at 2 AM
Come git me
Hardware 2014

- $150 Android “tablets for kids.”
- Game consoles (PS4, Xbox One, Wii U)
- Smarter smart phones
- Smarter TVs
- Blending of Toys with Tablets with Consoles
Sony PS4, Coming Friday
iPad Air (born 10/22/2013)
16 oz. • 20% thinner • 24% lighter

“using a new touch-rejection algorithm, iPad Air recognizes if your thumb is simply resting on the display while you’re holding it or if you’re intentionally interacting with the Multi-Touch screen”
iOS “Guided Access”

Use it to lock a child into just one app.

So if they hit the home button, they can't change apps unless they enter a pin. This feature can be useful for classrooms. A better name for this feature might be "app lock."

First find SETTINGS, and go to GENERAL and then ACCESSIBILITY. Set up your pin. Next start the app you want to lock, and triple press the HOME button.
InnoTab 3S
$100

LeapPad Ultra
$150

ClickN Kids Tablet
ClickN KIDS $99
“What we want to do is we want to put an incredibly great computer in a book that you can carry around with you and learn how to use in 20 minutes ... And we really want to do it with a radio link in it so you don’t have to hook up to anything and you’re in communication with all of these larger databases and other computers.”

Steve Jobs, in 1983 on Apple's simple strategy.
• A gazillion apps
• Moshi Monsters, Minecraft
• Google, Pinterest, facebook,
• Skylanders vs. Disney Infinite (remember Webkinz?); Furby Boom
• Linear media
• Books & eBooks
• A gazillion more apps
• Everyone’s an app critic
Minecraft
Who will dominate by next holiday season?
Every theory finds a champion in technology

- Constructivism
  - Portfolios
  - Whole Language
  - Bottom up
  - Liberal

- Behaviorism
  - Testing
  - Phonics
  - Top down
  - Conservative

|----- ~15 - 20 years -----|

Neither, and both are correct
Top Down

E.g., Hatch • Amplify

Strengths
• “Teacher proof”
• You don’t have to take the blame
• Efficient
• Clean and safe

Weaknesses
• Expensive
• Less control
• Lower quality
• Your students, their cloud
• What happens when the contract ends?
Bottom Up

Teachers (people who know children) choose apps they like.

Strengths
• More control
• Easier to integrate with your curriculum
• Higher quality and quantity

Weaknesses
• Less control
• Harder to measure
• Harder to manage
• More time currating
• You take the blame
• Messy
Bottom Up

LA Farmer’s Market
Amplify is reimagining the way teachers teach and students learn.

**Pricing**

**Amplify Tablet Package**

$199/year*

For 3 years.

The Amplify Tablet Package includes **all of the elements** you need to start or scale a 1:1 initiative.

*Additional leasing fees apply.

**Amplify Tablet Plus Package**

$325/year*

For 3 years.

The Amplify Tablet Plus Package includes **all the features** of the Amplify Tablet Package plus 4G LTE connectivity, smart data monitoring and more.

*Additional leasing fees apply.
What happens to student progress when the contract ends?
Smart Boards

Mono touch vs. multi-touch
“A penny earned is a penny saved”
The Anti Smart Board
Total: $976

- 50 inch HD (High Definition) large screen display ($420 at the Flemington Walmart)
- Articulating wall mounting kit ($50)
- Apple TV ($100)
- 16 GB iPad 2 ($350)
- Foam case for iPad ($40, www.gripcase.com)

http://childrenstech.com/blog/archives/12964
Uses

• Microscope
• Planning and Reviewing
• Showing off children’s work during an open house
• Introducing new apps (whole group time)
• ebooks
• Google searching/calendar/images
• Movies & videos (YouTube & Netflix)
• Field trip replay
Diana Adams, Minot ND Head Start
Three Stages of Multi-Touch Classroom Implementation (or Tablet Enhanced Learning)
Multi-Touch Learning
3 Stages

• **Beginner**: One tablet, some free apps, some use of camera. Play and experiment! If you don’t break it, you’re not trying hard enough. Use gift cards for apps.

• **Emerging**: 5 or so color-coded iPads hanging in each area, synched and managed by the teacher, plus 70 self-currated apps in the “cloud closet” that support the curriculum objectives.

• **Master**: Use in all parts of the daily routine; large and small screens; acute “app-sense,” plus a home sync connection, assessment and use for professional development, bilingual (Mac, Windows, iOS and Android).
How do you foster development?
Use Your Theoretical Toolkit
Provide Equilibration Time

- Play
- Let staff take home iPads
- Encourage personal ownership
- Make it safe to explore — no judgement, no dumb questions
“A wise person crawls before walking, and has the skinned knees to show for it.”
“You don’t bake the cake faster by turning up the oven.”
Sign above the piano at the Catherine Cook School

An expert at anything was once a beginner.
“Child development remains constant even as the context shifts wildly.”
- David Kleeman, President of the American Center for Children and Media
Drawnimal
Builds causality, creativity.
Lucas Zanotto.
www.lucaszanotto.com/
$1.99. Ages 3-5.
ColAR Mix
Builds creativity, visual relationships. Puteko Limited. colarapp.com
$free, and $2.99. Ages 3-up.
Cuddle Puzzle - Learn Shapes, Numbers, Music and More
Builds logic, classification, shapes. Croco Studio.
www.crocostudio.com $1.99 Ages 3-up.
Easy Studio - Animate with Shapes!
Builds animation, graphic arts. Les Trois Elles Interactive. 
Todo Telling Time
LocoMotive Labs http://locomotivelabs.com
Bugs and Buttons 2
Builds classification, logic, matching, seriation, alphabet order, memory, timing, temporal relations, angles, music.
Sago Mini Forest Flyer
Builds spatial relations. Sago Sago.
Moose Math
Builds math operations, up to 20, counting, addition, subtraction. Duck Duck Moose Design.
www.duckduckmoose.com $2.99 Ages 5-up.
Hello, little girl. Where are you off to?

I'm going to my grandma's house with this basket of food.

She had not gone very far before the Big Bad Wolf appeared.

Responsive, powerful, playful with different branches
Teachley: Addimal Adventure
Builds beginning addition. Teachley, LLC. www.teachley.com
$3.99. Ages 5-up.
The Human Body
Builds science, human anatomy, biology, health.
Tinybop, Inc.
www.tinybop.com
$2.99
Ages 4-up.
Why? Browser based, moves beyond the keyboard and mouse with webcam, the start of a tablet experience.
Rijksmuseum Online Art Collection
Builds art, history. Rijksmuseum.
https://www.rijksmuseum.nl
Shiny Picnic
Builds classification, sorting, logic, reading. Shiny Things.
Sago Mini Pet Cafe
Builds counting, sorting, fine motor skills, shapes.

Sago Mini Bug Builder
ABC Actions
Builds language, reading, vocabulary, Spanish.
Walt Disney (to the left of the storyboard) was famous for coming in to study storyboards at night or during weekends, so he would already be familiar with the new ideas at the next day's story meeting.
A storyboard is a means to an end—it helps artists imagine and decide how a scene will play. But these storyboard drawings, by legendary Disney animator Bill Peet, show that each small drawing is often a work of art in itself. This sequence includes the arrival of Cruella de Vil at the house where Perdita is expecting her puppies and her famous “I live for furs” line.
The title card above is from “Steamboat Willie,” the first Mickey Mouse short to be released (1928), and the world’s first cartoon with synchronized sound.
<table>
<thead>
<tr>
<th>Scene No.</th>
<th>Artist</th>
<th>Screen Footage</th>
<th>Anim. Footage</th>
<th>Date Start</th>
<th>B. G. Data</th>
<th>Description of Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>51</td>
<td>Blair Ugo</td>
<td>10.09</td>
<td></td>
<td></td>
<td></td>
<td>M.S. BROOM STARTS FROM - Mickey lifted into vat - truck down and pan to see him get second bucket of water in face. Cut to: (See Walt’s notes on this scene)</td>
</tr>
<tr>
<td>52</td>
<td>Moore Love</td>
<td>5.10</td>
<td></td>
<td></td>
<td></td>
<td>M.S. BROOM UP STAIRWAY TO COURTYARD - Mickey enters - gives excited command - dashes up after broom. Cut to:</td>
</tr>
<tr>
<td>53</td>
<td>Moore EFFX</td>
<td>28.03</td>
<td></td>
<td></td>
<td></td>
<td>M.L.S. MICKEY SEES TO STOP AT TOP OF stairs - looks out at broom - grabs ax runs out - shadows on door show chopping outside - light changes flash thru door - Mickey re-enters scene exhausted. Cut to:</td>
</tr>
<tr>
<td>53A</td>
<td>Love TECHNICIAN</td>
<td>7.00</td>
<td></td>
<td></td>
<td></td>
<td>M.C.U. SPLINTERS OF BROOM SCATTERED beside fountain - breathe twice - Cut to: (New sc. on Draft 3, was part of 56. Sc. 53 is cut as of Draft 3)</td>
</tr>
</tbody>
</table>

Even though tiny in size, these color images from *The Sorcerer’s Apprentice* convey the dramatic progression of the sequence through its various scenes.
Before I depart ...
Take the child’s point of view
WE ALL NEED HELP
SOONER OR LATER....
IF YOU HAVE SPECIAL NEEDS
PLEASE TALK WITH US
Reward your own development
Get down off your thrown
JEAN PIAGET IN 1964
“The principle goal of education is to create men who are capable of doing new things, not simply of repeating what other generations have done—men who are creative, inventive, and discoverers. The second goal of education is to form minds which can be critical and cannot accept everything they are offered. The great danger today is of slogans, collective opinions, ready-made trends of thought. We have to be able to resist individually, to criticize, to distinguish between what is proven and what is not. So we need pupils who are active, who learn early to find out by themselves, partly by their own spontaneous activity and partly through material we set up for them; who learn early to tell what is verifiable and not what is simply the first idea to come to them.” (Piaget, “Development and Learning, 1964, p. 5; from Piaget’s Theory of Intellectual Development, 3rd Edition by Ginsburg and Oppen).
Welcome to America, home to 5% of the world’s people & 25% of the world’s prisoners.

Let's build a better America together. NAACP.org/smartandsafe
AND REMEMBER...
It could be worse...
Thanks!