Apps and Software in Early Childhood Classrooms: A Continuum of Teaching Tools

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Increasingly young children have access to a broad range of engaging technologies including educational software, web based resources, interactive multimedia and Apps. While many of these resources have the opportunity to positively enhance learning and play, teachers also need to consider the pedagogic approaches afforded by these tools. Further, we need to reflect on the design of technology tools and on how this changes children’s engagement and learning.

This session will:
• Explore some of the amazing technology resources available for teaching and learning with young children.
• Discuss how the design of interactive multimedia, educational software and Apps alter, enhance or enable teaching and learning with young children
• Investigate some of the pedagogical and philosophical decisions that educators make about the use of technology in learning and play.
Who am I?

And may I introduce Dr Kristy Goodwin?

shifting ground
Question time:
Our background impacts us as teachers
Mark Sparvell @sparvell
#acec2012 ICT- I for INSPIRE, C for CONNECT and T for TRANSFORM @palnetau

Lisa Newland @lnewl4
@sparvell @palnetau #SER QLD have been using for some time. Great to see it now.
Technological Pedagogical Content Knowledge (TPACK)

Technological Knowledge (TK)

Technological Content Knowledge (TCK)

Pedagogical Knowledge (PK)

Content Knowledge (CK)

Pedagogical Content Knowledge
Question time: Who is out there and where are you teaching?
we need to critically reflect.... to know our children and our goals for their learning... to rediscover the art of teaching

pedagogy, paedagogy
1. the function or work of a teacher; teaching.
2. the art of teaching; pedagogics.

pedagogy
the principles, practice, or profession of teaching
Technology is a tool
Screens???


mobilebehavior.com

savingtoberich.com

technografy.blogspot.com

ebay.com.my
Today we seek best practice...
Consider the tool’s affordances and your pedagogic goal
Classification of Pedagogical Design

- Instructive
- Manipulable
- Constructive

Goodwin & Highfield, 2012 “iTouch and iLearn”
'Game' app
Overt extrinsic rewards
Drill and practice
Goals & missions
Minimal cognitive investment
Can be fun!
instructive

manipulable

constructive

http://www.youtube.com/watch?v=YiPZI71HpGU
Some capacity to make choices

Guided discovery

Multiple responses possible
instructive

manipulable

constructive

http://www.abc.net.au/abcforkids/sites/playschool/about/apps/
Open-ended

High cognitive involvement

Creative

Limited extrinsic rewards
instructive

manipulable

constructive

http://www.youtube.com/watch?v=bEU0EmiZcAk
Analysis by pedagogic design
(Goodwin & Highfield, 2012)

85%

instructive

11%

manipulable

4%

constructive
Evaluating quality?
Buckleitner, 2012

- Features
- Entertaining
- Easy to use

Goodwin, 2012

- Features
- Appealing
- Intuitive

- Novel way of learning
- Educationally sound
- Educational

- Value
Choose wisely then match to your children and your pedagogic goal…
Constructive: create and communicate
Manipulate: manipulate content and ideas
Instructional: obtaining content and information, practicing specific skills
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@sparvell @palnetau #SER QLD have been using for some time. Great to see it...
How does it work?
Plan (for children) then research (software or App selection)…tap into your PLN and PLANE

Think through Content Context and Child (Lisa Guernsey)  
http://www.lisaguernsey.com/articles.htm

Address licensing issues
Don’t let the App guide learning.
You are the pedagogista....
Further information??

**BLOGS / Repositories and reviews:**
- [http://www.schrockguide.net/bloomin-apps.html](http://www.schrockguide.net/bloomin-apps.html)
- [http://www.teachingappz.co.uk/](http://www.teachingappz.co.uk/)

**Key research:**
- [http://www.joanganzcooneycenter.org/Reports-34.html](http://www.joanganzcooneycenter.org/Reports-34.html)
- [http://www.commonsensemedia.org/learning-ratings](http://www.commonsensemedia.org/learning-ratings)