Why and How to Evaluate Educational Technology for Early Learners

Lilla Dale McManis

EETC 2012
EARLY EDUCATION AND **TECHNOLOGY** FOR **CHILDREN**

Why & How to Evaluate Technology
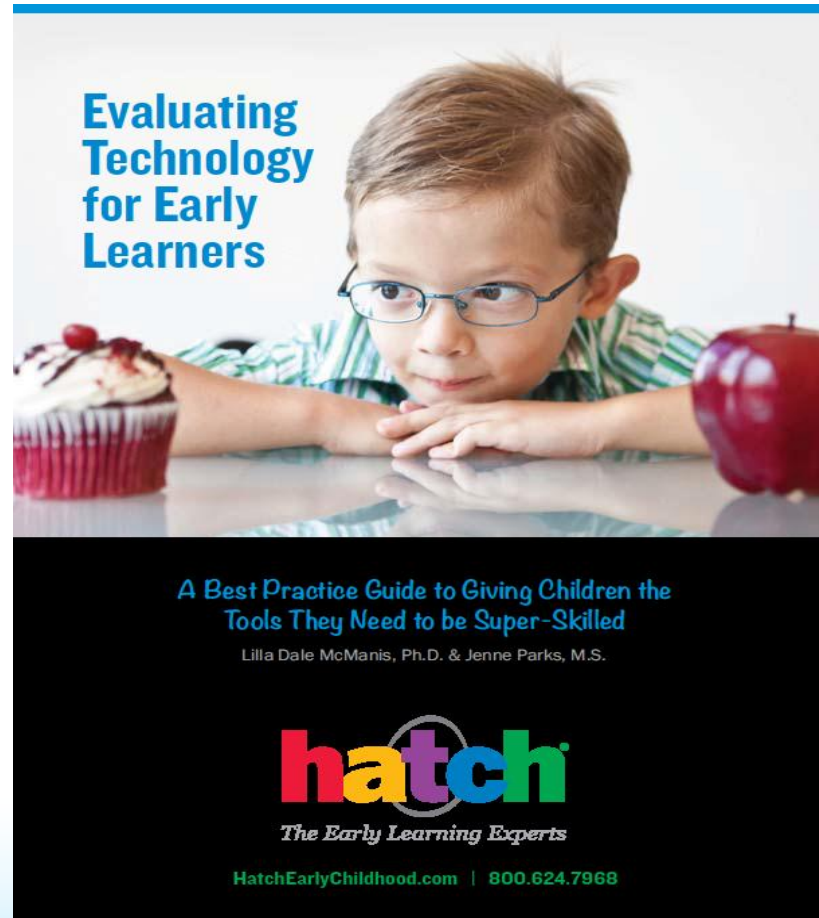# for Early Learners

EETC Conference
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March 2012
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Evaluating Educational Technology

- eBook

Interactiv... Toolkit

EARLY CHILDHOOD EDUCATIONAL TECHNOLOGY EVALUATION TOOLKIT

Complete the following worksheet for each major educational technology purchase consideration. Please see accompanying directions for further explanation and examples.

Date: _____   Evaluator(s): _____

Organization: _____

Age group: _____ Older Toddlers   _____ Preschooler   _____ School Age (Grades _____)

Type: _____ Regular Education   _____ Special Needs (Disability: _____)   _____ ELL   _____ Title 1

GOALS

_____ a. Approaches to learning (curiosity, attention, flexible thinking/creativity, persistence)

_____ b. Language/Literacy   _____ c. Mathematics   _____ d. Science

_____ e. Social Studies   _____ f. Social-Emotional (cooperation, collaboration, identifying emotions)

HARDWARE

_____ a. Desktop or laptop computer (mouse and keyboard)   _____ b. Desktop or laptop computer (touch screen)

_____ c. Interactive whiteboard   _____ d. Tablet   _____ e. Multi-touch table or surface

SOFTWARE

Software Title: _____   (1 = No   2 = Unsure   3 = Somewhat   4 = Yes)

		1	2	3	4
1. Educational	a. Learning versus focus on winning?	1	2	3	4
	b. Content research and/or learning standards based?	1	2	3	4
	c. Feedback informative/teaches?	1	2	3	4
2. Appropriate	a. Appropriate cognitive skill(s)/subject matter?	1	2	3	4
	b. Set in interesting/appealing context?	1	2	3	4
	c. Pre/non-readers can navigate?	1	2	3	4
	d. Free from bias?	1	2	3	4
3. Child-Friendly	a. Simple/clear choices?	1	2	3	4
	b. Multiple, positive opportunities for success?	1	2	3	4
	c. After adult support, children can use independently?	1	2	3	4
4. Enjoyable/Engaging	a. Enough activities with variety?	1	2	3	4
	b. Appropriate use of rewards?	1	2	3	4
	c. Realistic graphics and appealing to intended age?	1	2	3	4
	d. Activities match well to attention span?	1	2	3	4
5. Progress Monitoring/Assessment					
	a. Covers all the key areas the software teaches?	1	2	3	4
	b. Easy to use and interpret?	1	2	3	4
6. Individualizing Features	a. Can be customized for child's needs?	1	2	3	4
	b. Allows creation of new activities?	1	2	3	4

INTEGRATION

	1	2	3	4
a. Initial training/professional development on integration included?	1	2	3	4
b. Ongoing training/professional development opportunities?	1	2	3	4

SCORE

(Total Score ÷ 80) × 100 = _____

(90-100 = A, 80-89 = B, 70-79 = C, 60-69 = D, <59 = F)

_____ Purchase   _____ Continue to Consider this Option

_____ Do Not Purchase   _____ Consider other Options
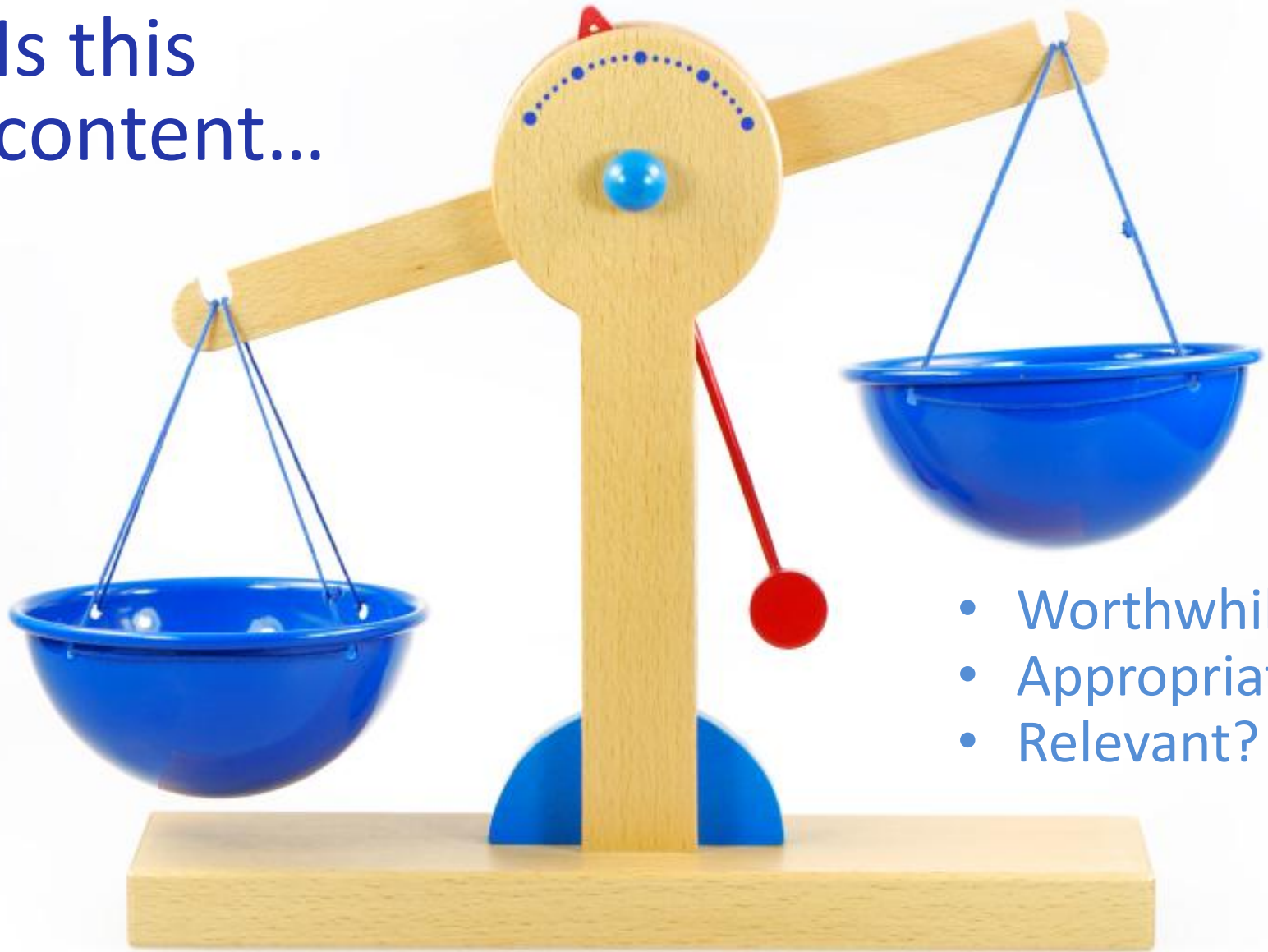
COMMENTS

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Selecting Appropriate Educational Technology

- **Goals**
- **Technology**
- **Content**

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Learning Goals

- Approaches to Learning
- Cognitive
- Social-Emotional

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Is this content...

- Worthwhile?
- Appropriate?
- Relevant?

Educational Value

- Focus
- Standards
- Feedback

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Age-Appropriate

- Subject Matter
- Skill Level
- Interest & Appeal
- Free of Bias

Child Friendly

- Clear & Simple Choices

- Opportunities for Success

- Independent Learning

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Captures Engagement

- Variety
- Rewards
- Graphics
- Audio

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Assessment & Progress Monitoring

Progress Monitoring To Meet Individual & Group Needs

- Differing Group Sizes
- Variance of Skills & Goals
- Capture & Keep

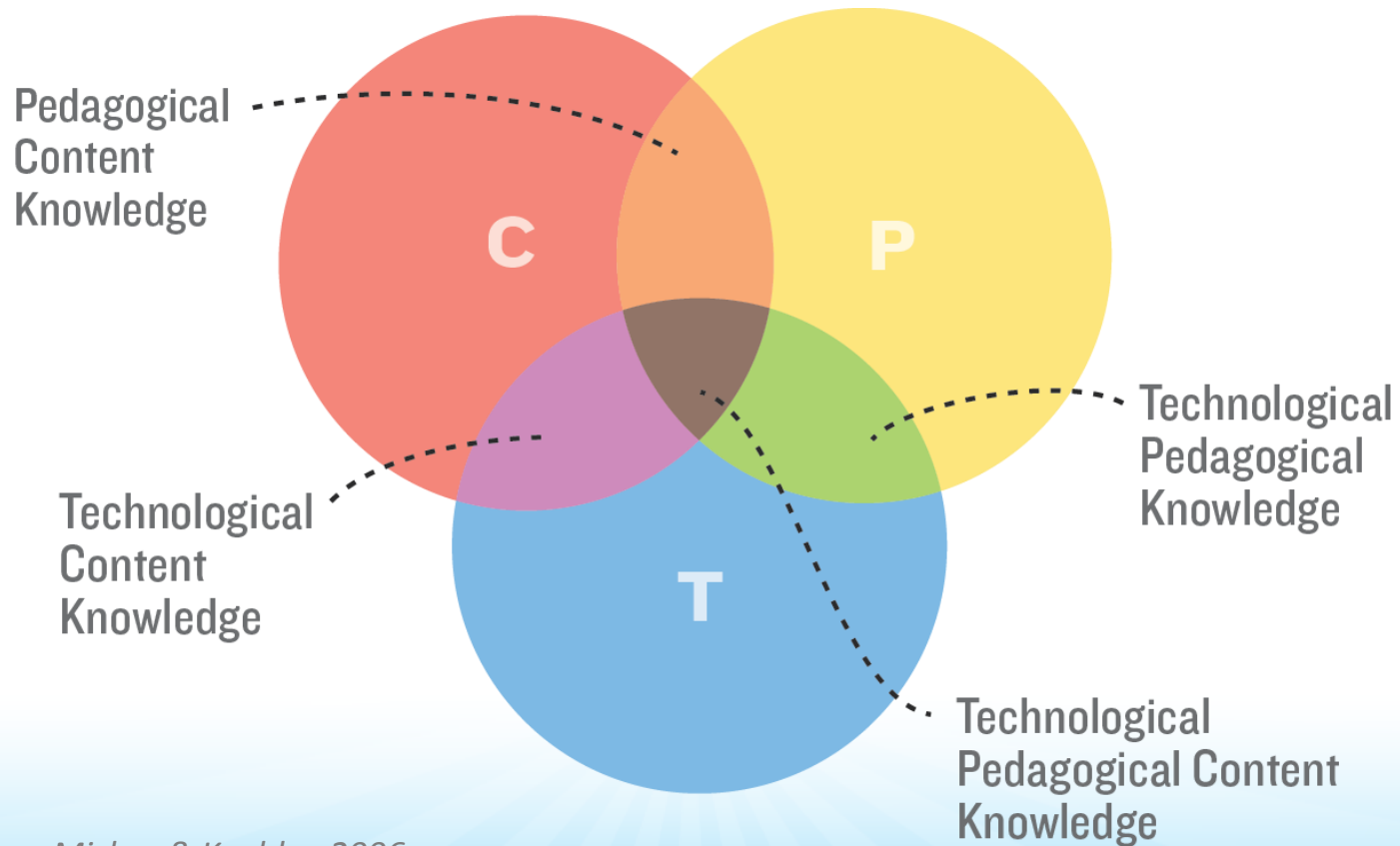# Additional Features

- Customization
- Create Activities

Takes time to fully support children's learning

Sheingold & Hadley, 1990

Sustained Staff Development: Bringing It All Together

Pedagogical Content Knowledge

C

P

Technological Content Knowledge

Technological Pedagogical Knowledge

T

Technological Pedagogical Content Knowledge

Adapted from Mishra & Koehler, 2006

Teacher Training =

Increased

1) Interactions
2) Constructivist Ideas
3) Scaffolding

Shute & Miksad, 1997

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Interactive Toolkit

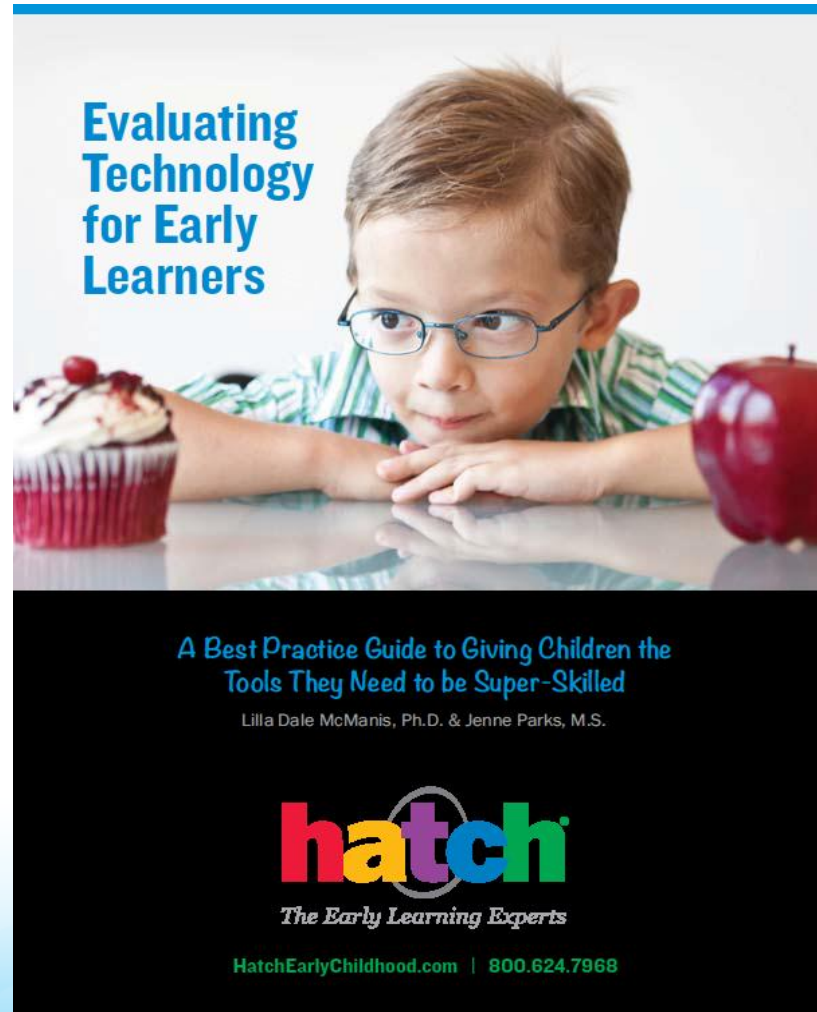## EARLY CHILDHOOD EDUCATIONAL TECHNOLOGY EVALUATION TOOLKIT

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What Does Using Technology Look Like for You?

- How are you using technology with early learners?

- What is really working great?

- Where are there challenges?

- How do you see your technology use changing in the future?

NAEYC /Rogers Center Technology Position Statement Guiding Principle

Effective uses of technology and media are:

- active

- hands-on

- engaging

- empowering

- give the child control

- provide adaptive scaffolds to ease task accomplishment

- one of many options to support children's learning

Summary

- Research supports young children can benefit from using educational technology

- But it must be of high quality and developmentally appropriate

- There are key aspects that must be considered

- Doing so in a thoughtful, intentional, and regular manner will help practitioners make the best decisions for early learners

http://www.hatchearlychildhood.com/pages/evaluating-technology-for-early-learners

Q & A
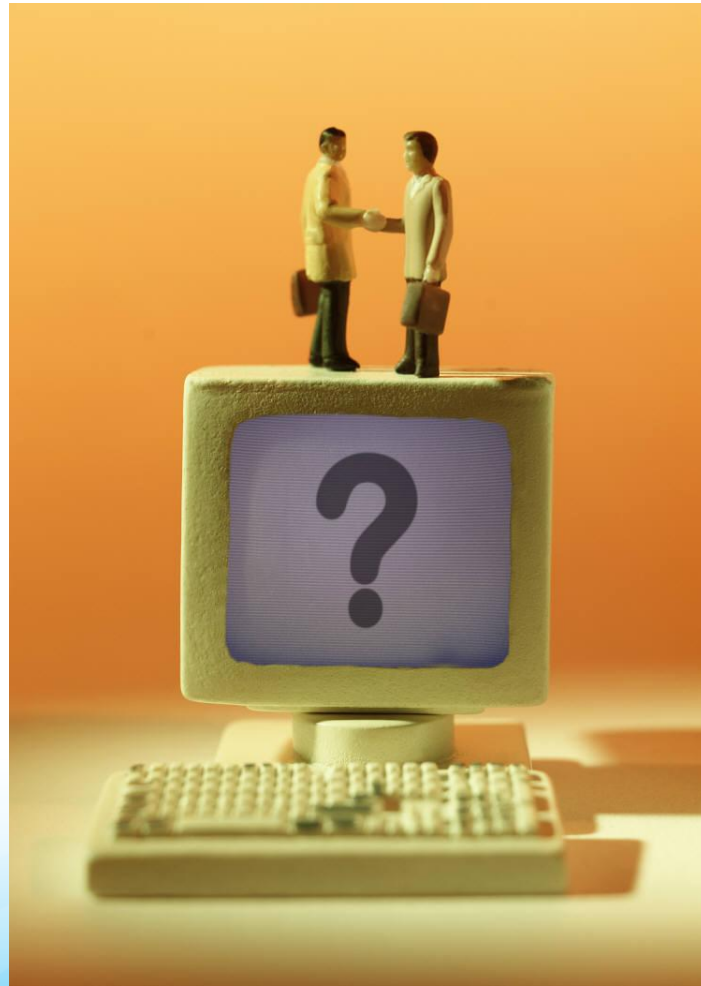
Good places for social connections

- http://www.ecetech.net/

- LinkedIn: Early Childhood Technology Network

- Twitter: #ecetechchat

  – Every Weds. night @ 9 EST

Special Announcement

http://www.ecetech.net/about/early-childhood-technology-collaborative/

Early Childhood Technology Today Survey 2012

OPEN NOW!!