

advancing  
children's learning  
in a digital age

the Joan Ganz Cooney Center at Sesame Workshop



# Pockets of Potential

## Using Mobile Devices to Promote Children's Learning

*October 30<sup>th</sup>, 2009*



# Agenda

1. About The Joan Ganz Cooney Center
2. Pockets of Potential
3. iLEARN
4. Cooney Prizes for Innovation

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“How can emerging media help children learn?”  
- Joan Ganz Cooney, 1969

A report  
to Carnegie Corporation  
of New York ---

THE POTENTIAL USES

OF

TELEVISION

IN

PRESCHOOL EDUCATION

by  
Joan Ganz Cooney

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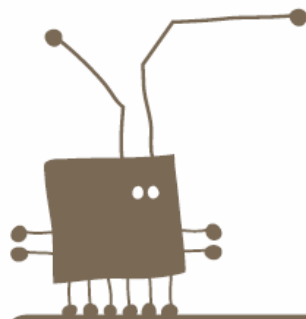
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1969



2009





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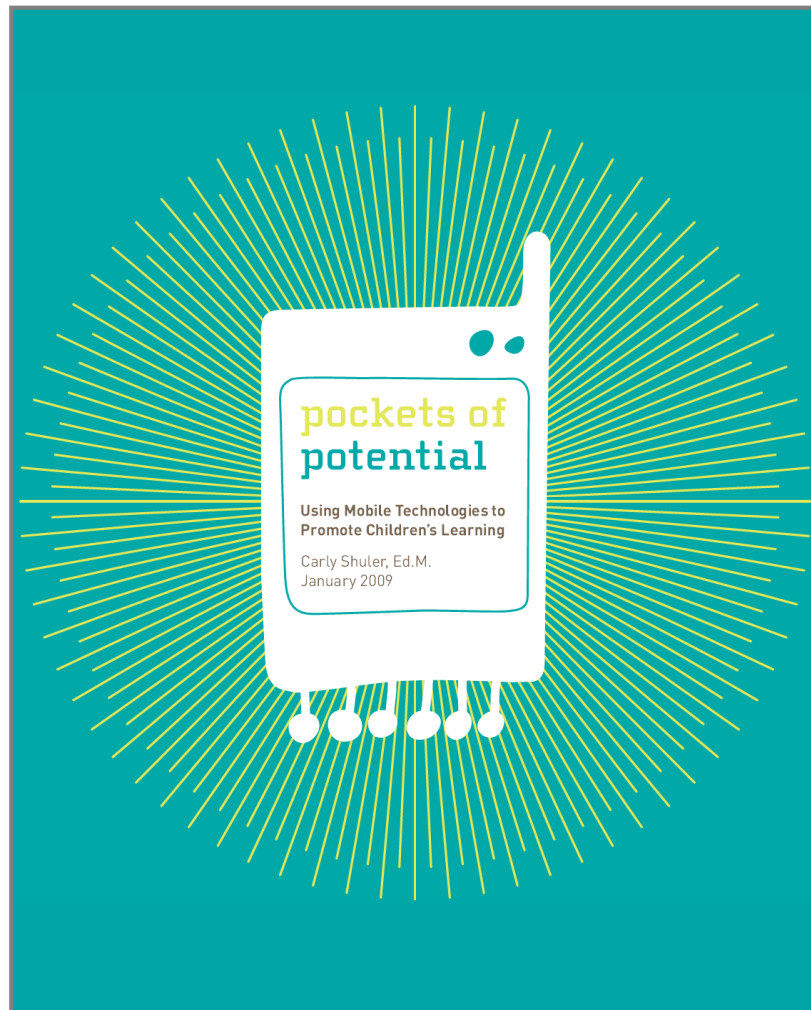
## Mission:

To foster innovation in children's  
learning through digital media.

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## POCKETS OF POTENTIAL



**Analyses the current state of mobile learning,** *including an inventory of more than 25 projects in the U.S. and beyond.*

**Identifies key opportunities and challenges** *in the field of mobile learning.*

**Recommends goals and an action plan** *to transform mobile learning into a force for dynamic educational impact.*



## Children's Media on the Move

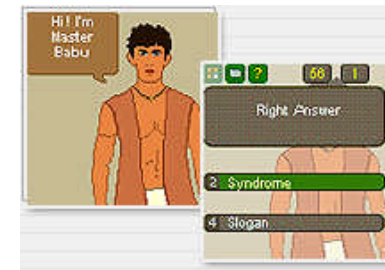
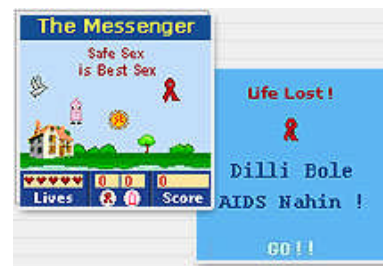
- Mobile device ownership among children ages 4-14 has experienced double-digit growth since 2005, making them the strongest growth category in consumer electronics for kids. (NPD Group, 2008)
- Almost all children in the U.S. have access to a mobile device, with 93% of 6-to-9-year-olds living in a home with a cell phone. (Sesame Workshop, 2007)
- Even our youngest school-children are using cell phones and smart-phones (Project Tomorrow, Speak Up Survey, 2009)

Which of these devices do you have access to?			
	Gr K-2	Gr 3-5	Gr 6-8
Smartphone (cell phone/PDA with Internet access)	19%	14%	24%
Cell phone (without Internet access)	19%	38%	64%
Desktop computer	53%	61%	73%
Laptop computer	31%	48%	50%
MP3 player or iPod	32%	50%	80%

## Other major sectors have shown innovative advances in this area:

### ➤ Health

- India's Freedom HIV/AIDS initiative uses mobile phone games to educate people about HIV/AIDS on up to 40 million handsets. (Freedom HIV/AIDS, 2008)



### ➤ Banking

- Vodafone rolled out a mobile-banking program in Kenya, and gained 200,000 new customers within a month. (Corbett, 2008)

### ➤ Politics

- Barack Obama announced his choice of vice president to supporters via text message and activated a wide-reaching campaign operation. (Kornblut, 2008)

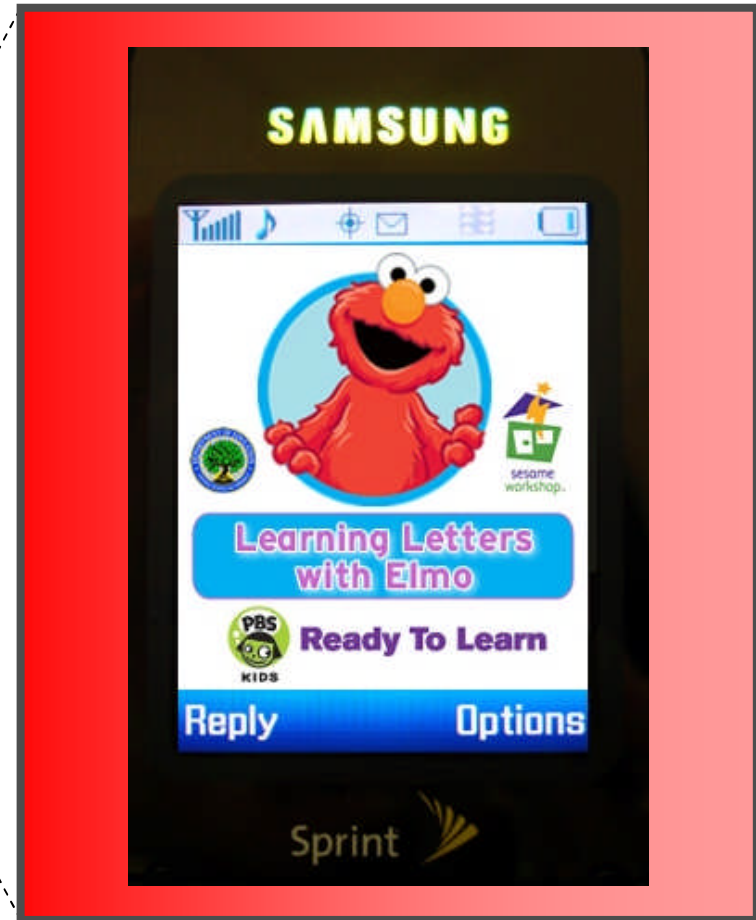
### ➤ Citizen Journalism

- Some of the most intimate, immediate and widespread images and news about Mumbai's fall 2008 terrorist attack came from mobile devices. (Forbes, 2008)

## Opportunity: Reach Underserved Children

- Reach Children from Disadvantaged Socioeconomic Groups
- Reach Underserved Children Worldwide

➤EXAMPLE:  
Learning Letters  
with ELMO



## Opportunity:

### Encourage “Anywhere, Anytime” Learning

- Promote Situated Learning
- Break the barrier between home, school and after school

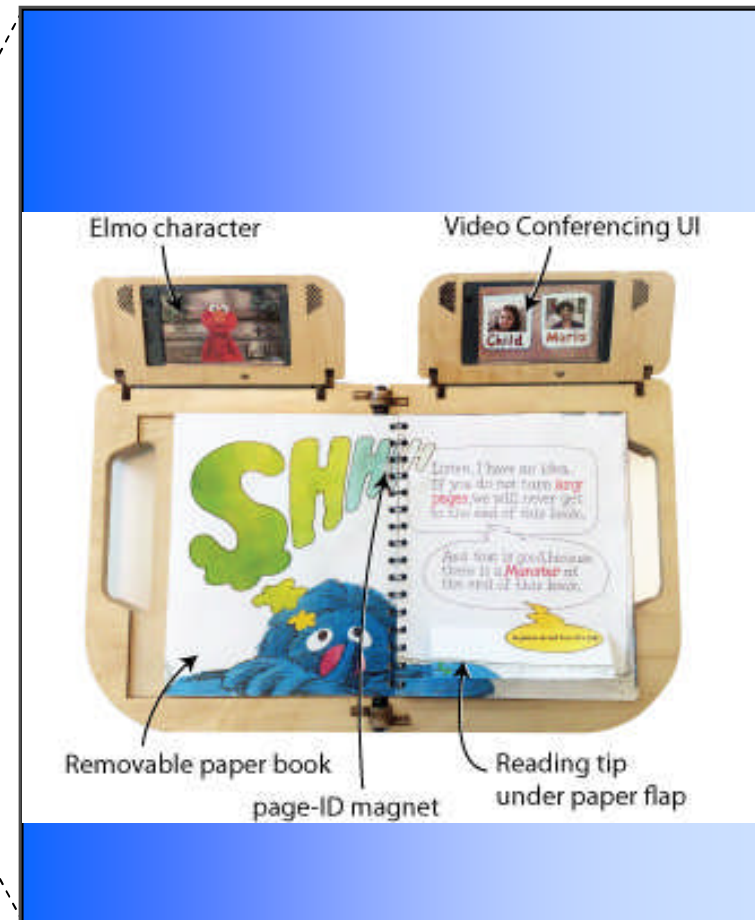
➤EXAMPLE:  
Handheld  
Augmented  
Reality Games



## Opportunity: Improve 21<sup>st</sup> Century Social Interactions

- Communication
- Collaboration
- <http://research.nokia.com/projects/storyplay>

### ➤EXAMPLE: StoryPlay



## Opportunity: Fit with Learning Environments

- Learning in the classroom
- Informal learning

➤EXAMPLE:  
TechPals



## Opportunity:

Enable a personalized learning experience



➤EXAMPLE:

Project iREAD

## Key Challenges in Mobile Learning

- Negative aspects of mobile learning
- Cultural norms and attitudes
- No mobile theory of learning
- Differentiated access and technology
- Limiting physical attributes



**LEARN**

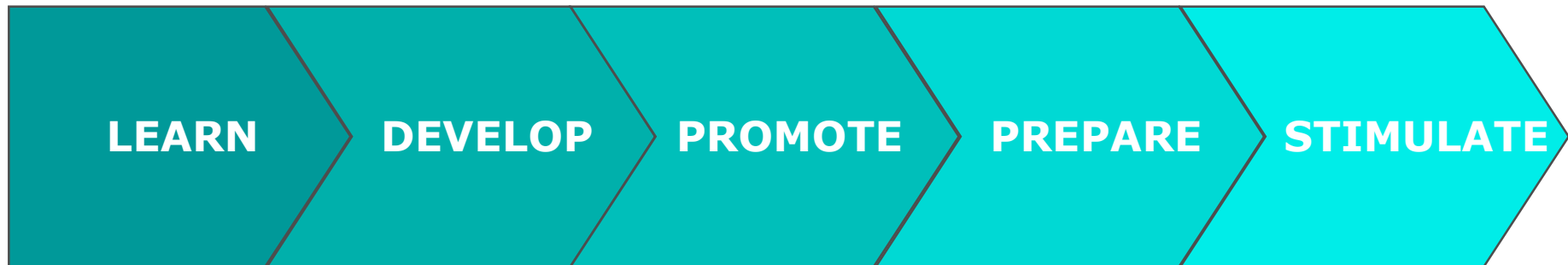
**DEVELOP**

**PROMOTE**

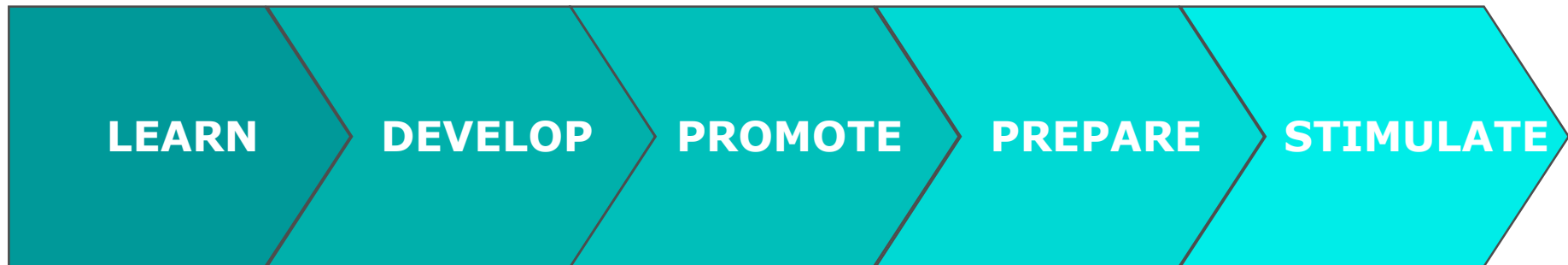
**PREPARE**

**STIMULATE**

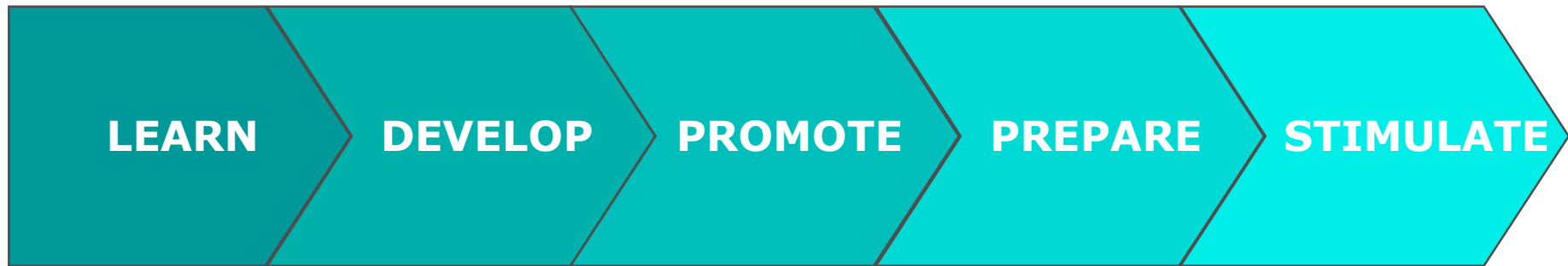
- Invest in understanding the development of mobile kids
- Develop new theories and models for leveraging mobile technologies
- Learn from other countries



- Design educational innovations to capitalize on the unique affordances of mobile
- Counter the disadvantages and limiting physical attributes of mobile devices
- Avoid constant defaults to the latest technology
- Create development tools for educators



- Scale up and disseminate innovative exemplars of mobile learning
- Provide incentives for needed infrastructure
- Develop educational standards for industry



- Build capacity; Digital teacher corps
- Modify and gradually eliminate classroom bans
- Integrate mobile themes in media literacy curricula



- Create a White House initiative on digital learning

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## Children's Apps invade iTunes

- Over the past six months, Nickelodeon, PBS Kids Sprout and Disney have all entered the App market that is pegged to generate more than US\$1.2 billion in 2009 (Rusak, 2009)
- Preschool-oriented 'Wheels on the Bus' has been the top paid education App for months.
- With more than 21,000 games available for the iPhone and iPod touch compared with only hundreds on the DS and PSP (Tabuchi, 2009), it is not surprising that kids developers are taking this platform very seriously.



## There is a significant market for children's educational Apps

- Nearly half (47%) of the top 100-selling Apps target preschool or elementary aged children.
- Toddler/preschool apps are more prominent than those for older children

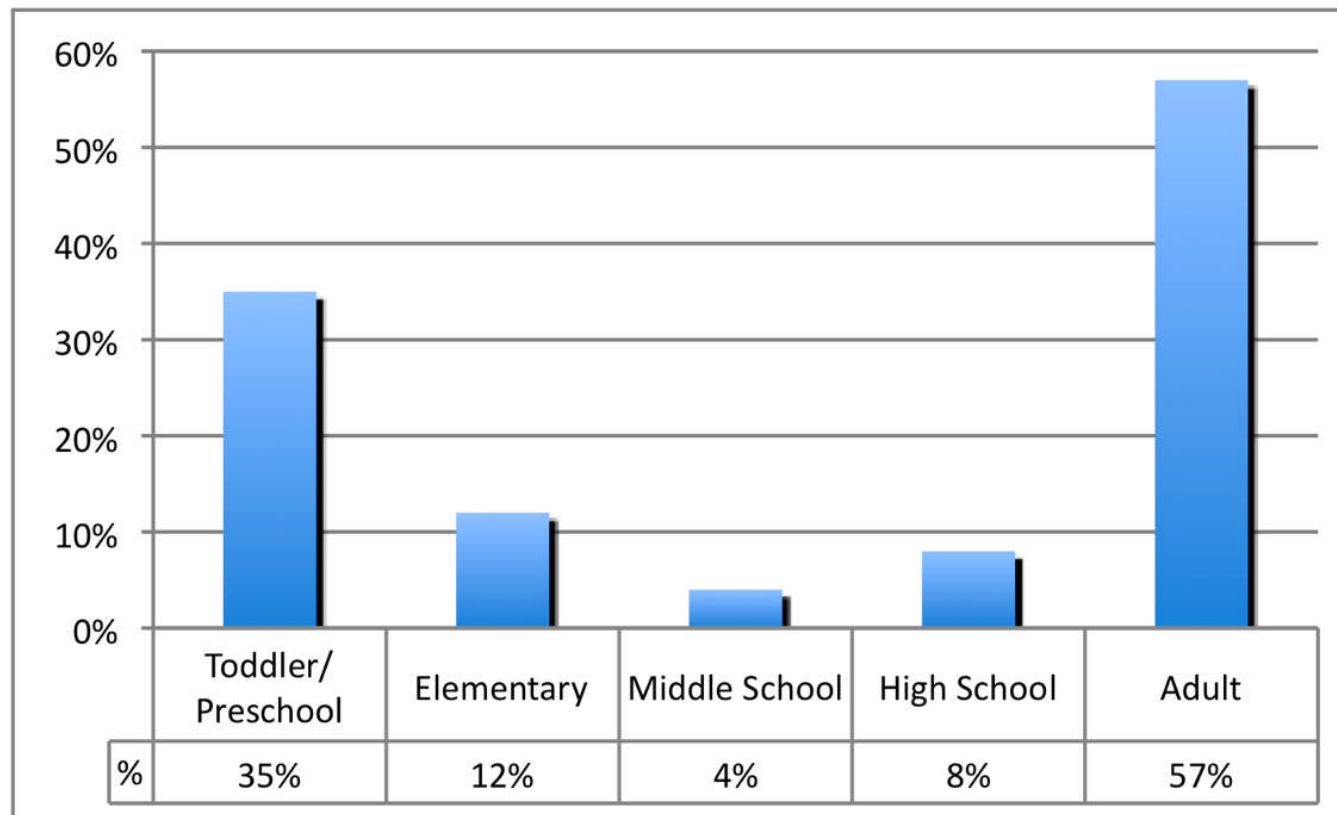


Figure 2: Target Age (N=100)



## Children's Educational Apps are Top-Sellers

- 60% of the top 25 Apps target toddler/preschool children – almost double the number that target adults (36%).

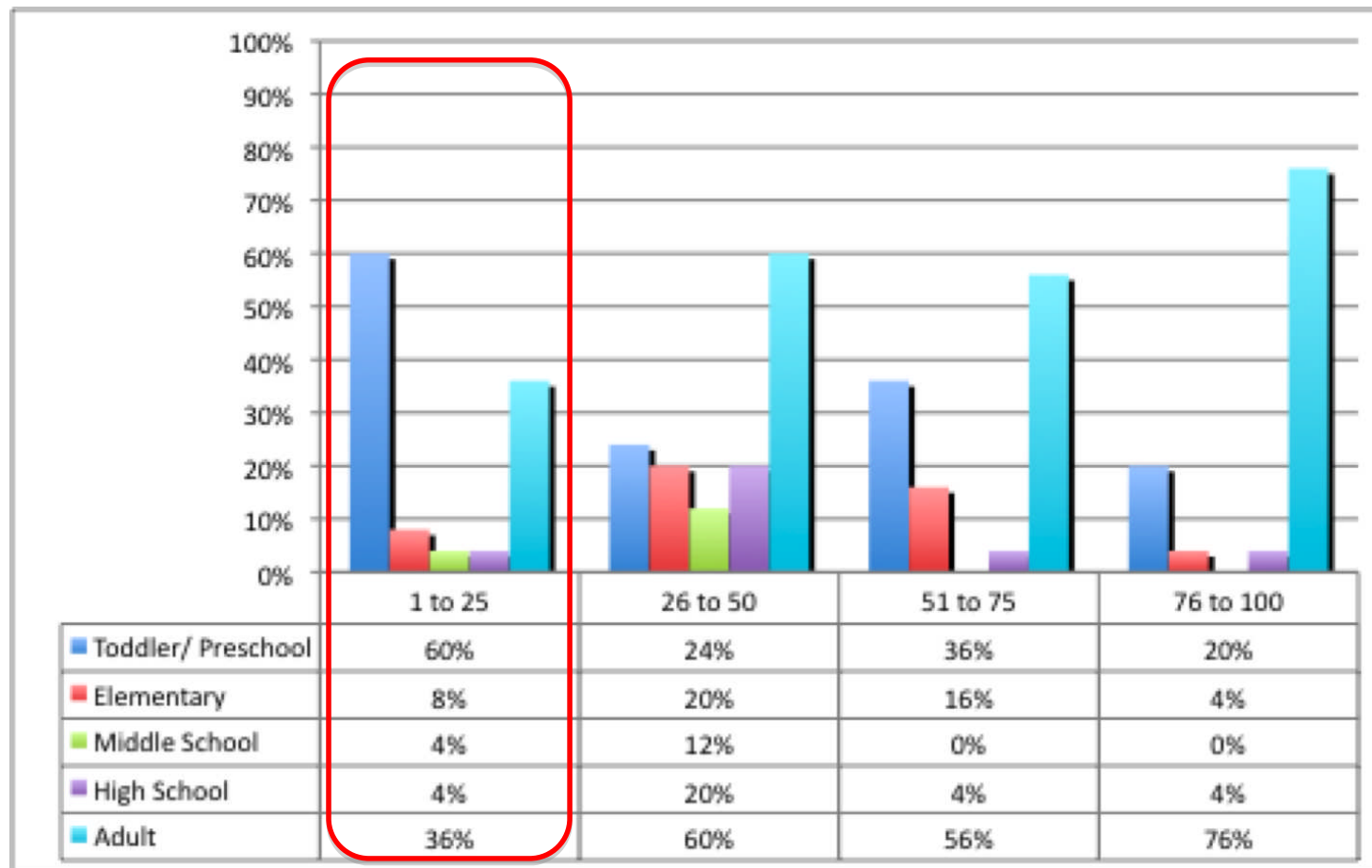


Figure 1. Target Age by App Ranking (N=100)

\*Percentages add up to more than 100% because each App could be tagged for more than one age group.

## Apps are available in a variety of different subjects

- General early learning is amongst the most popular subjects

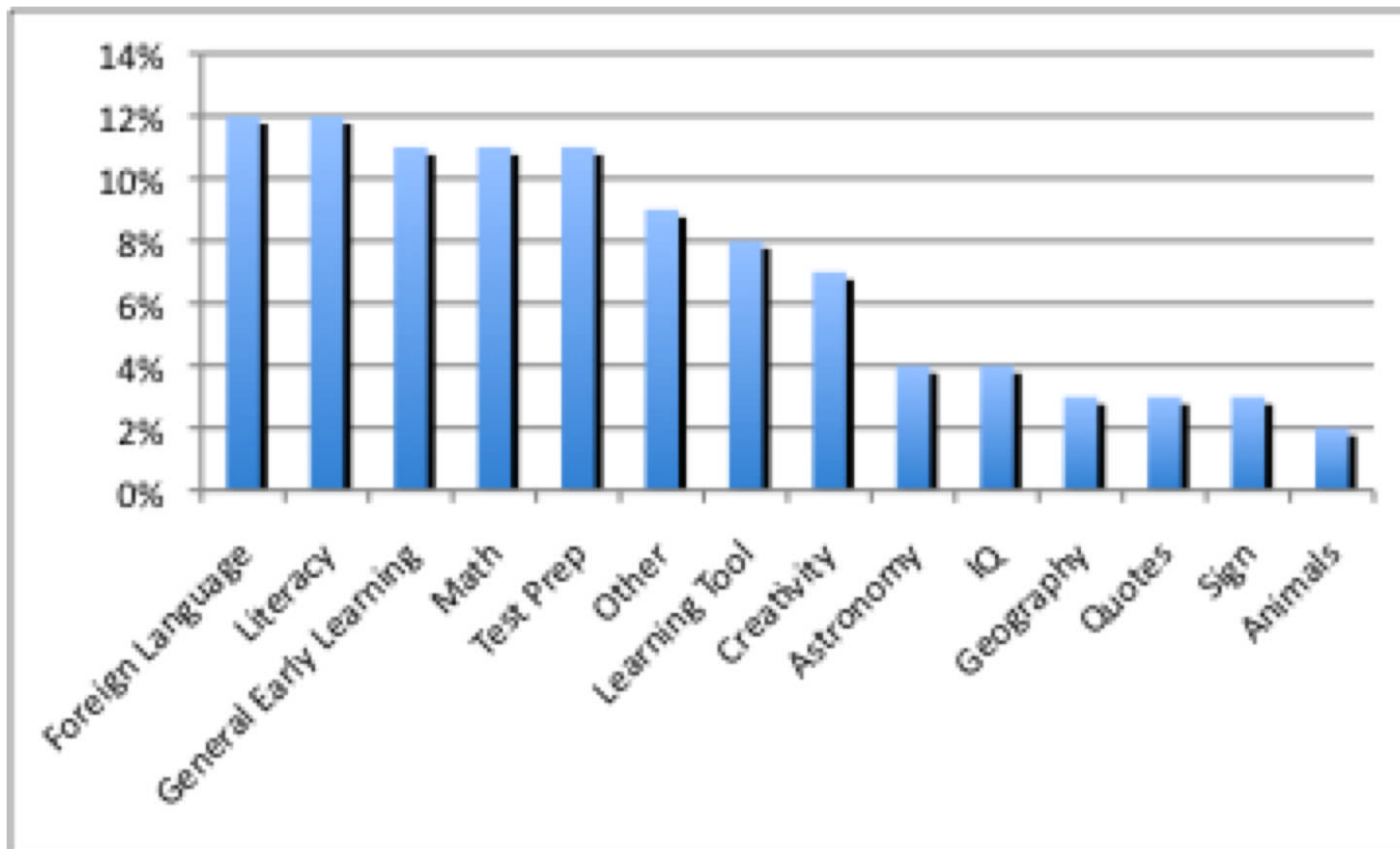


Figure 3: Subject (N=100)

## Children's Apps are less expensive than those targeting adults

- Child-targeted Apps are significantly cheaper than those targeting adults, with most child Apps being priced at \$0.99.
- The weighted average price for a child's App is \$1.14, as compared to \$5.77 for adults.
- The top 100 selling apps range from 0.99 - \$149.99, however no child-targeted app exceeds \$2.99.

	Child (N=51)	Adult (N=59)
\$ 0.99	88%	47%
\$ 1.99	10%	8%
\$ 2.99	2%	8%
\$ 4.99	0%	17%
\$ 5.99	0%	3%
\$ 7.99	0%	5%
\$ 9.99	0%	7%
\$ 11.99	0%	2%
\$ 149.99	0%	2%

**Table 1. Price by Age Group**

## Recommendations

- Apps are unquestionably a new medium for providing educational content to children nationwide, both in terms of their availability and popularity.
- Producers should develop Apps that take advantage of the unique affordances of the iPhone and iPod Touch.
- The academic community should pay attention to Apps as an important potential factor in children's mobile learning.
- Policy-makers should work with Apple and other mobile industry leaders to engage in consumer protection initiatives to ensure that educational claims are accurate.
- Parent magazines, websites and watchdog groups such as Common Sense Media, Consumer Reports' and Parent's Choice should monitor this growing industry to provide consumer information and guidance.

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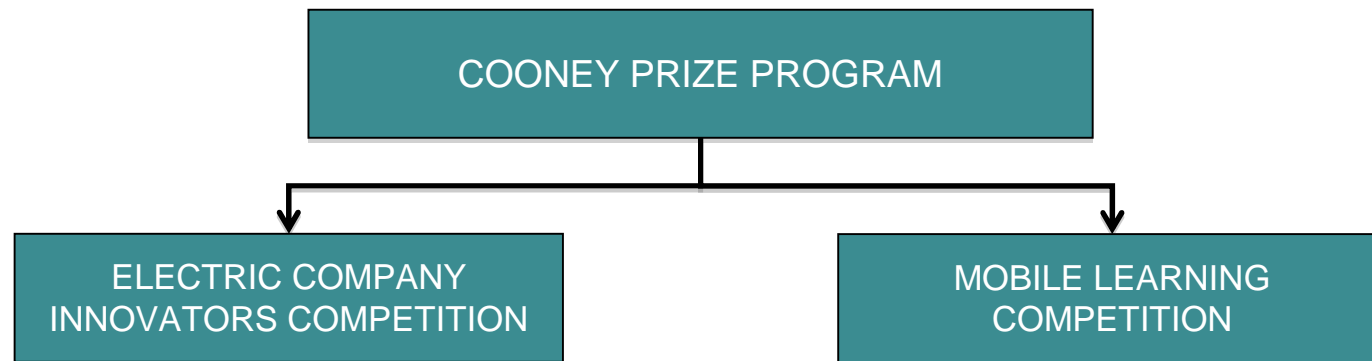
## The Cooney Prizes for Innovation in Children's Learning



The goal of the Cooney Prizes is to identify, inspire, nurture, and scale breakthrough ideas in children's digital media and learning. The program will annually award cash prizes and provide ongoing business planning support and mentorship to a new generation of children's media entrepreneurs and visionaries.

## Prize Categories

The Cooney Prize Program will launch with two streams, each focused on innovation in promoting literacy among young children using digital media.



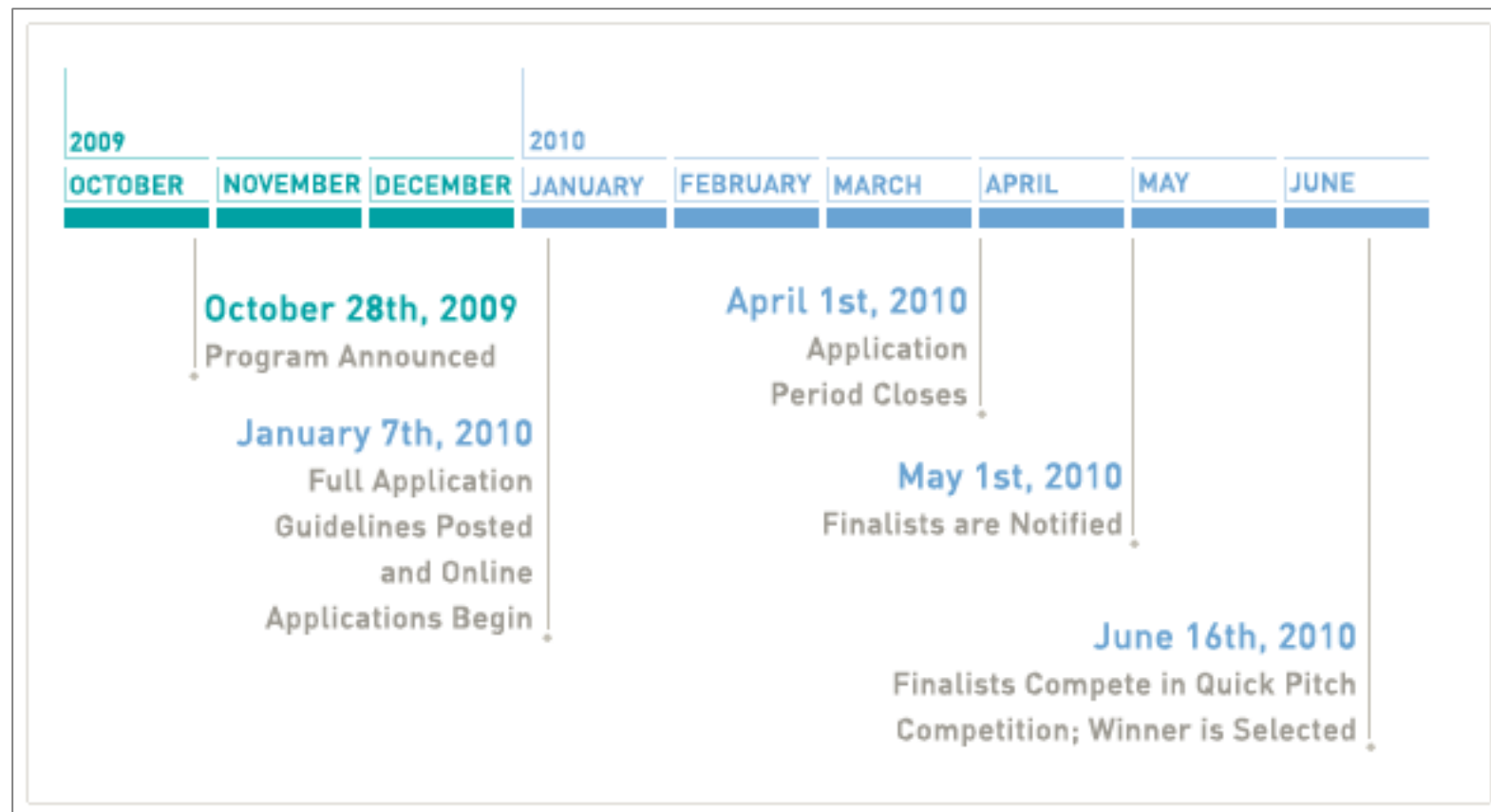
**Challenge:** Applicants are invited to submit ideas for a digital media experience that will promote literacy learning among struggling readers, using Sesame Workshop's revival of the iconic literacy show, The Electric Company,

**Prize:** The winner will receive \$10,000 and the opportunity to work with Sesame Workshop to turn their idea into a real product.

**Challenge:** Applicants are invited to submit early-stage prototypes for concepts that push the current boundaries of mobile learning.

**Prize:** The winner will receive \$50,000 to put towards development of their concept, as well as mentorship support from a group of experts that will help move the idea from concept to reality.

## Timeline





## Jury

- All eligible applications will be evaluated by a distinguished jury of reviewers from multiple disciplines who possess expertise in digital media and/or children's learning and health, including:
  - John Couch, Vice President Education, Apple Inc.
  - Allison Druin, Human Computer Interaction Lab, University of Maryland
  - Alan Gershenfeld Founder, President and CEO, E-Line Ventures
  - Bing Gordon, Partner, Kleiner Perkins Caufield & Byers
  - Gary Knell, President and CEO, Sesame Workshop
  - Laird Malamed SVP of Production, Guitar Hero Business Unit, Activision
  - Liz Perle, Editor-in-Chief, Common Sense Media
  - Mitchel Resnick, Head of Lifelong Kindergarten Group, MIT Media Laboratory
  - Nile Rodgers, Musician & Director of We are Family Foundation
  - John Shen, Head of Nokia Research Center Palo Alto
  - Kim Smith, Co-Founder and Senior Advisor, NewSchools Venture Fund

“We don’t pretend that media or a television show can solve the problems of our world, but we do believe it would be a terrible mistake not to use these most influential tools to contribute to the solutions.”

*- Joan Ganz Cooney, 1969*

1969



2009



# Thank You!

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