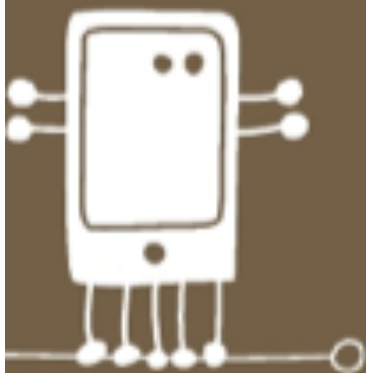


iLearn II: An Addendum

An Analysis of the Games Category of Apple's App Store



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Summer 2012

The Joan Ganz Cooney Center at Sesame Workshop

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Suggested citation: Shuler, C. (2012). *iLearn II: Addendum, An Analysis of the Games Category of the iTunes App Store*. New York: The Joan Ganz Cooney Center at Sesame Workshop.

INTRODUCTION

In January 2012, the Joan Ganz Cooney Center at Sesame Workshop released *iLearn II: An Analysis of the Education Category of Apple's App Store*. The report, an examination of the 200 top-selling Education category apps for Apple's iPad and iPhone, was the latest in our iLearn line of research which aims to monitor the important and growing market for educational apps for children as it grows and evolves. Though the Education category is the home for most educational apps, when it comes to what children are using there is no question that much of the content they consume is downloaded from the Games category, which has an entire section devoted to children's content. Thus, in terms of leveraging apps to further children's learning, it is important to understand the Games category as well as the Education category. In this light, the Cooney Center analyzed the **top-selling paid apps** in the Games category of Apple's iTunes App Store for this addendum.

The methodology used to analyze the Education category in *iLearn II* was exactly replicated within the Kids' Games category for this analysis. All methods and limitations are the same as those outlined in *iLearn II*, with the exception of those outlined in Appendix A.

KEY FINDINGS

Using [iLearn II](#) as a benchmark, the Joan Ganz Cooney Center undertook an examination of the Games category within iTunes' app store. Among the key findings regarding this market and its trends were:

- **Games category apps are less expensive than Education category apps**
Overall, children's apps in the Games category are less expensive than those in the Education category, with an average price of \$1.65 as compared to \$2.41. Furthermore, 58% of Games apps are priced at \$0.99, whereas only 35% of Education apps are at this low price point, and the highest priced app in the Games category was \$4.99, as compared to \$19.99 in the Education category.
- **Almost a third of Games Category apps made some sort of educational claim**
Thirty-two percent of Games category apps made some sort of educational claim, stating an intended learning objective. All (100%) of these apps targeted toddler/preschool aged children, and 10% also targeted Elementary aged kids.
- **Apps for kids is a highly fragmented market**
Eighty-one different publishers were represented within the sample of 200 apps. This is slightly less than were represented in the Education category (109), but is still indicative of a highly fragmented market.
- **Ten publishers had five or more apps within the sample, including both large corporations and independent developers**
Out of the 81 publishers who had apps in the sample, 10 publishers had five or more apps in the Game category sample. In contrast to the Education category where all seven publishers with five or more apps were small developers, the 10 Games publishers included both large children's brand owners such as MTV, Disney and PBS Kids as well as small independent developers such as Duck Duck Moose.
- **Branding is much more prevalent in Games than Education**
In *iLearn II*, we noticed an absence of branded characters within the Education category of the app store. It was not surprising to find a significantly stronger presence of mainstream brands within the Games category, where almost 40% of the apps were branded, as compared to just 1% in the Education category.

Findings

AGE

The Games Category has an entire section just for kids

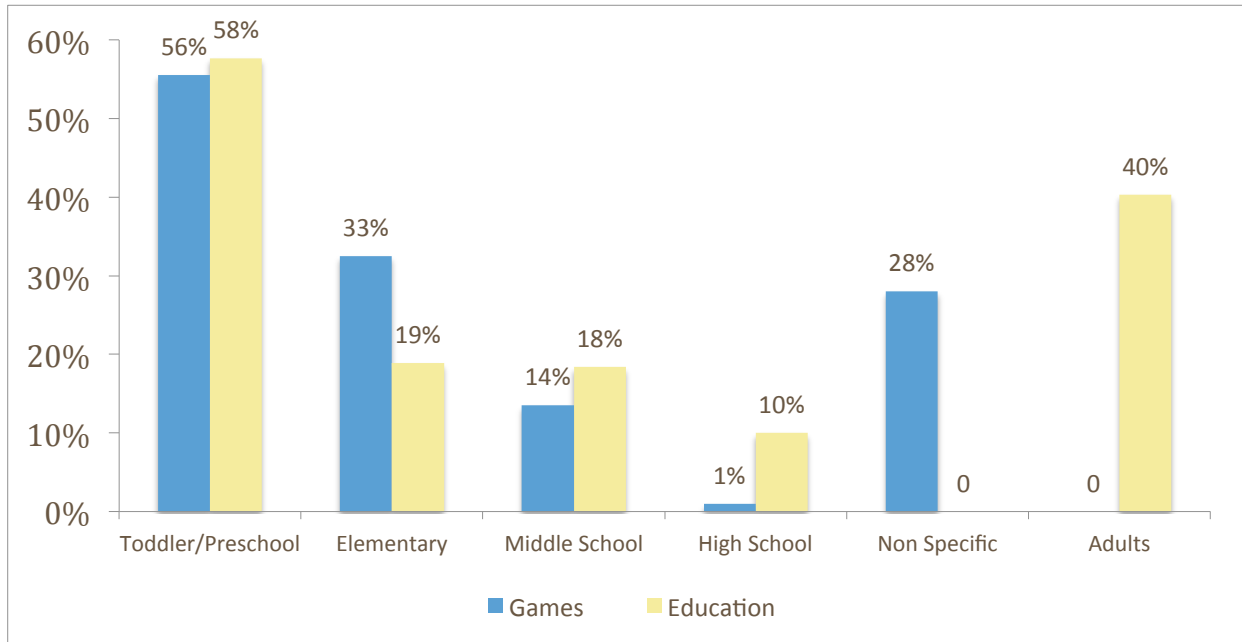
In contrast to the Education category of the iTunes App Store, the Games category has an entire section devoted just to kids. This dedicated section allows parents to quickly and easily locate content developed specifically for children, something that is more difficult to do within the Education category.

Target age is generally consistent between the Games & Education categories

The most popular age group for apps in the Games category was the toddler/preschool demographic, and in general the Games category followed the same age target age trend as Education in which popularity decreases with age. There were fewer apps targeting high school students in both categories, but arguably high school youth would gravitate towards adult-oriented apps, particularly in a non-educational domain.

Chart 1: Age

Percentage of apps that target:



N Games = 200; N Education = 196

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

**In contrast to the Education category, the Games category has an entire section devoted just to kids. Thus, the 'non-specific' code did not exist in the Education category, and the "Adults" code did not exist in the Games category.

PRICE

Games category apps are less expensive than Education category apps

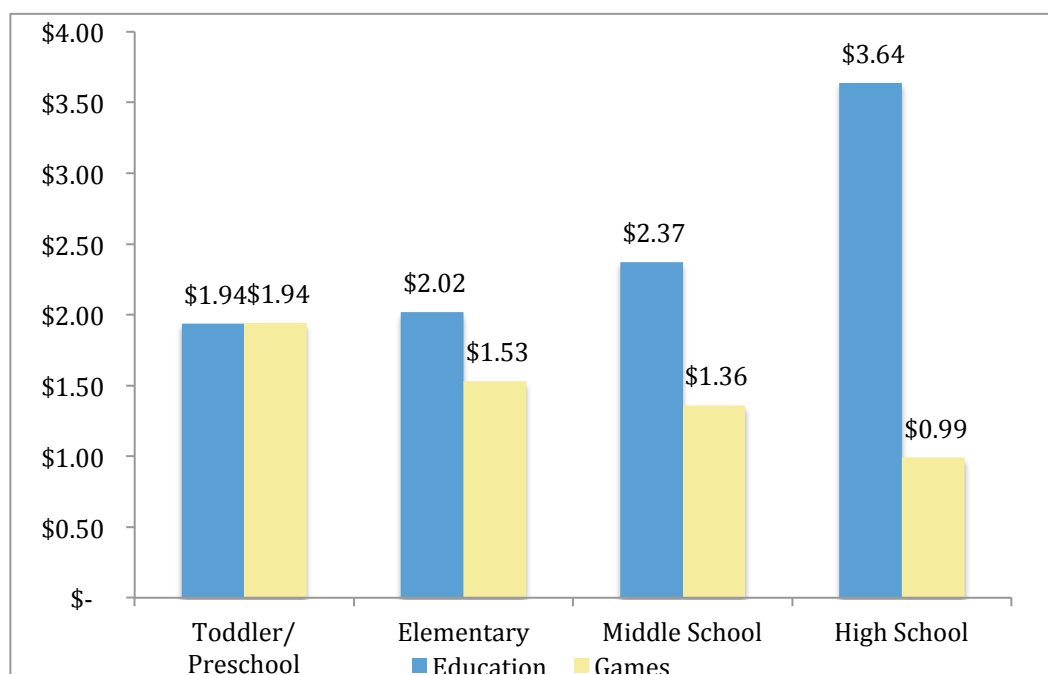
Overall, children's apps in the Games category are less expensive than those in the education category, with an average price of \$1.65 as compared to \$2.41. Furthermore, 58% of Games apps are priced at \$0.99, whereas only 35% of Education apps are at this low price point. Although most apps in both categories remain below the \$5.00 price point, no app in the Games category was more expensive than \$4.99. This is in sharp contrast to the Education category, where the highest priced app was \$19.99. In a market based on such low price points, this difference is a considerable one.

Price	Games	Education
\$0.99	35%	58%
\$1.99	35%	27%
\$2.99	17%	11%
\$3.99	4%	3%
\$4.99	6%	3%
\$7.99	1%	0%
\$9.99	1%	0%
\$19.99	2%	0%

In the Games category, app price decreases with age. The opposite is true in the Education category.

In the Games category, app price decreases with target age. Interestingly, an opposite trend is seen within the Education category, where the price of a child's app increases with age. This may indicate a premium placed on educational content for older children, and gaming content for younger children. This is an important consideration for developers deciding where to place their app within the market.

Chart 2: Price by Category



Average price of apps that target:

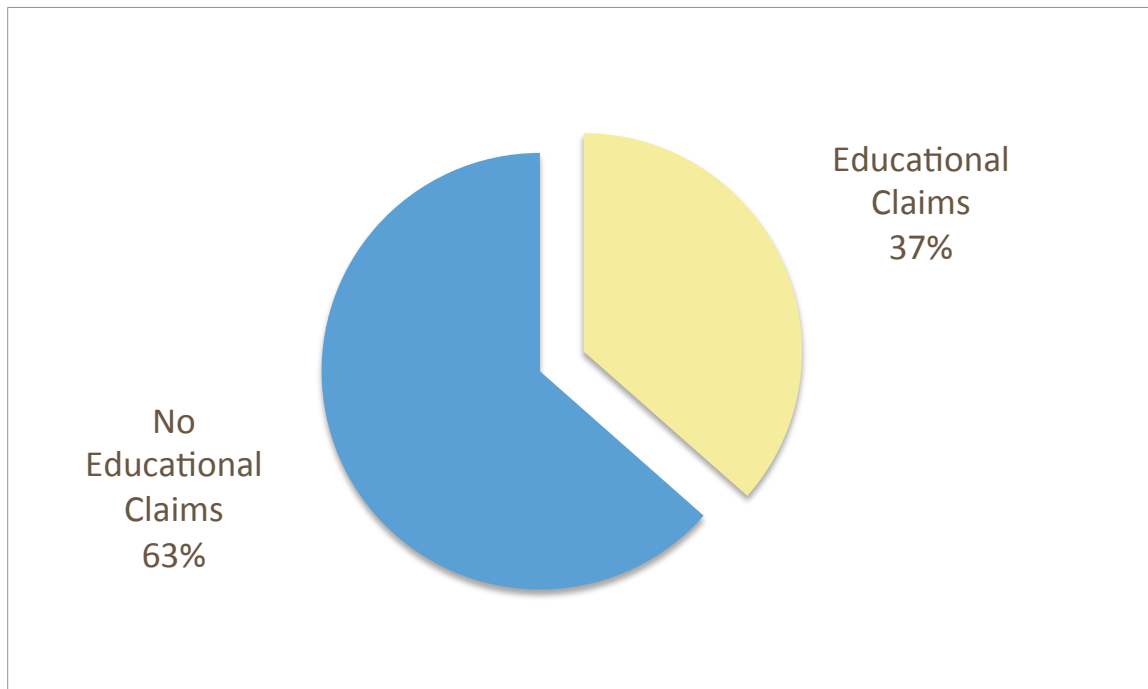
SCHOOL USAGE & EDUCATIONAL INTENTION

Almost a third of the apps made some sort of educational claim

Interestingly, 32% of the apps made some sort of educational claim, stating an intended learning objective. All (100%) of these apps targeted toddler/preschool aged children, and 10% also targeted Elementary aged kids. Almost 40% of these apps were based on a popular branded character.

Chart 3: Educational Claims

Percentage of apps that made Educational Claims:



N=200

No apps in the Games category mentioned school usage

As compared to 14% of the apps in the Education category, no apps in the Games category mentioned intended school usage.

PUBLISHERS

Apps for kids is a highly fragmented market

Eighty-one different publishers were represented within the sample of 200 apps. This is slightly fewer than were represented in the Education category (109), but is still indicative of a highly fragmented market.

Ten publishers had five or more apps within the sample, including both large corporations and independent developers

Out of the 81 publishers who had apps in the sample, 10 publishers had five or more apps in the Game category sample, compared to seven publishers with five or more apps in the Education category. In contrast to the Education category, those 10 publishers included a number of major children’s brand owners, including MTV, Disney and PBS Kids. The publishers with five or more apps in the sample of top-sellers included:

Table 2: Publishers with 5 or more Apps in the sample

Education Category		Games Category	
Publisher	Apps	Publisher	Apps
Duck Duck Moose	10	Maverick Software	15
Dan Russell-Pinson	8	MTV Networks	15
ABCya.com	6	Bonnier Digital Services (Toca Boca)	8
Kids Place	6	Shoe the Goose	8
22learn LLC	5	Duck Duck Moose	7
Grasshopper Apps	5	Walt Disney	7
Vito Technology Inc.	5	More Maker Booth Store	6
Grasshopper Apps	5	PBS Kids	6
Vito Technology Inc.	5	Apps Kids Love	5
Grasshopper Apps	5	THUP Games	5

Few publishers had apps in both the Games and Education categories

Only six publishers had apps in both the Education and Games categories: 22learn, Learning Touch, Duck Duck Moose, Night & Day Studios and Shoe the Goose.

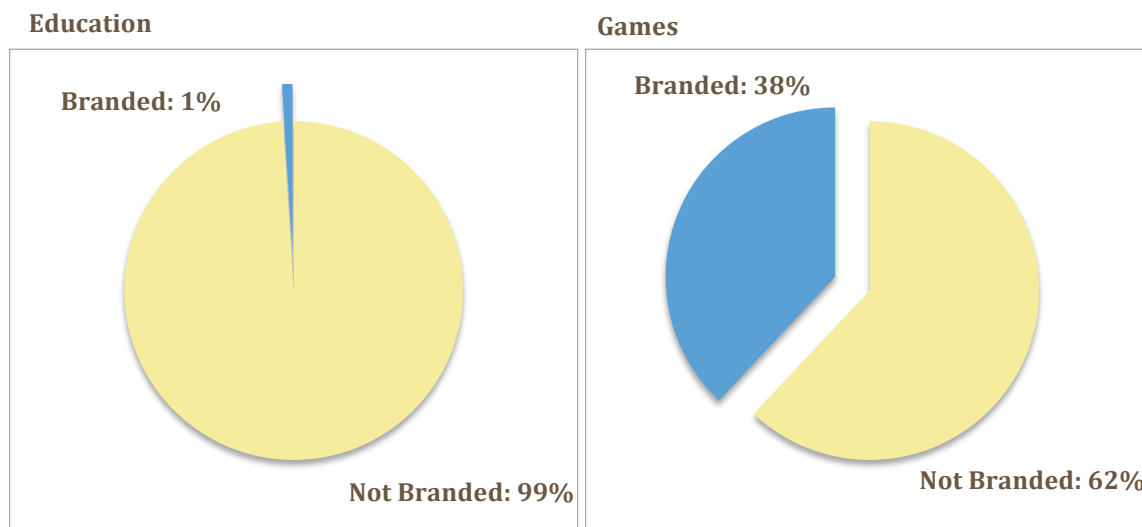
BRANDING

Branding is much more prevalent in Games than Education

Despite some evidence that children may learn better through media when a socially meaningful character is involved (Lauricella et al, 2011), in *iLearn II*, we noticed an absence of branded characters within the Education category where only 1% of the apps were branded. Thus, it was not surprising to find a significantly stronger presence of mainstream brands within the Games category, where almost 40% of the apps were branded.

Chart 4: Branding

Percentage of apps that are based on popular brands from other mediums:



N Games = 200; N Education = 196

39 brands were represented in the sample

From Elmo to WWE, a significant range of brands was found in the sample. A complete list of brands can be found in the Appendix on page 11 of this report.

Branding is consistent across age demographics

It was hypothesized that brands may be particularly prominent among the toddler/preschool demographic, but in reality the percentage of branded apps was fairly consistent across age groups.

Branded apps cost slightly more than non-branded apps

Branded apps cost an average of \$1.99, somewhat more than non-branded apps, which cost an average \$1.44.

Appendices

A. METHODOLOGY & LIMITATIONS

As with *iLearn* and *iLearn II*, a database of apps was analyzed using a content analysis, a research tool used to determine the presence and relationships of certain characteristics within content. This database does not assess the quality or effectiveness of any specific product, nor does it represent an exhaustive list of every product available. Rather, it provides a basis for analyzing the kinds of products that are available and popular in the market for apps, and the general market trends and dynamics that are at play.

In January 2012, the Joan Ganz Cooney Center compiled a sample of 200 apps that included the 100 top-selling paid apps for both the iPad and iPhone in the Kids' Games category of the iTunes App Store. All apps in the database were coded for the following characteristics: age, price, school usage, educational learning claims, subject, branding and ratings. All categories of coding except for ratings were based on the developers' marketing of their own products. Ratings were based on consumer ratings in iTunes.

Two researchers coded the characteristics that were prone to subjectivity: age, branding, school usage, and educational claims. Inter-rater reliability across these categories was 90%. In instances where the coders disagreed, a third researcher reviewed the app and also consulted two external sources—Common Sense Media and Children's Technology Review—to make a final judgment.

The methodology used to analyze the Education category in [iLearn II](#) was exactly replicated within the Kids' Games category for this analysis. Thus, all methods and limitations are the same as those outlined in *iLearn II*, with the exception of those outlined below.

Age: What age is this app's target user?

Because the section we analyzed within the Games category was specifically for kids, it was deduced that *all* apps in the sample target children. This is in contrast to the Education category, where kids don't have their own section. Thus, a new category had to be added when coding for age within the Games category. Whereby in the Education category, all games could be reliably attributed to at least one (although sometimes more) age group, there was a bulk of games for which this was significantly more difficult for within the Games category. These games were coded as "Non Specific."

Learning Claims: Does the app make any educational or learning claims?

The presence of educational learning claims was determined by reading the app description. If the description explicitly noted an education or learning objective or outcome, the app was tagged as making a learning claim.

B. BRAND LIST

Brands & Number of Apps			
Alice in Wonderland	1	I SPY	1
Angelina Ballerina	1	Kung Fu Panda	2
Arthur	2	Littlest Pet Shop	1
Baby Einstein	1	Moose and Zee	1
Barney	1	OLIVIA	1
Caillou	1	Phineas and Ferb	2
Chuggington	2	Pokemon	1
Crayola	1	Power Rangers	1
Curious George	1	Rubik's Cube	2
Dinosaur Train	1	Sid the Science Kid	1
Disney Fairies	1	Sonic	2
Dora	8	SpongeBob	5
Dr. Seuss	3	Strawberry Shortcake	1
Elmo	3	SUPER WHY	4
Eric Carle	2	Thomas & Friends	3
Fireman Sam	1	Toy Story 3	2
Go Diego Go!	2	Webkinz	2
Handy Manny	1	WWE	1
Harry Potter	2	Yo Gabba Gabba	2
How to Train your Dragon	1		

C. REFERENCES

Lauricella, A.R.; Gola, A.A.H.; Calvert, S.L. (2011). Toddlers' learning from socially meaningful video characters. *Media Psychology*, 14 (2), 216-232. Retrieved from:
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This report has been produced in partnership with E-Line Media with generous support from the Bill and Melinda Gates Foundation and the John S. and James L. Knight Foundation. Any opinions, findings, and conclusions or recommendations expressed in this publication are those of the authors and do not necessarily reflect the views of E-Line Media, the Bill and Melinda Gates Foundation and the John S. and James L. Knight Foundation.

This study was independently conducted by the Joan Ganz Cooney Center without involvement of the Apple Corporation.

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