

iExploration:  
Using an iPad for Vision  
Stimulation

by Laura Campaña, M.A.

Perkins  
Webinar  
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JUNIOR



BLIND<sup>®</sup>  
OF AMERICA

Infant & Early  
Childhood  
Program



# iPad Pilot Program

- 60 children
- Similar disabilities
- 100% of children made progress



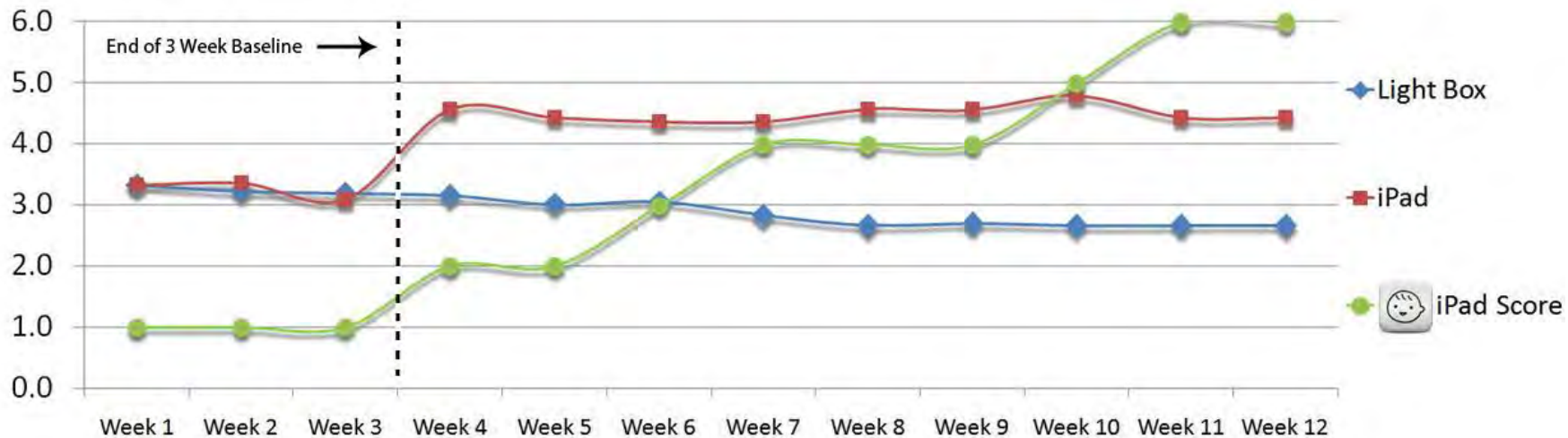
# Areas Covered

- Length of Engagement
- Communication
- Visual Attentiveness
- Reaching
- Activation
- Parent Interaction

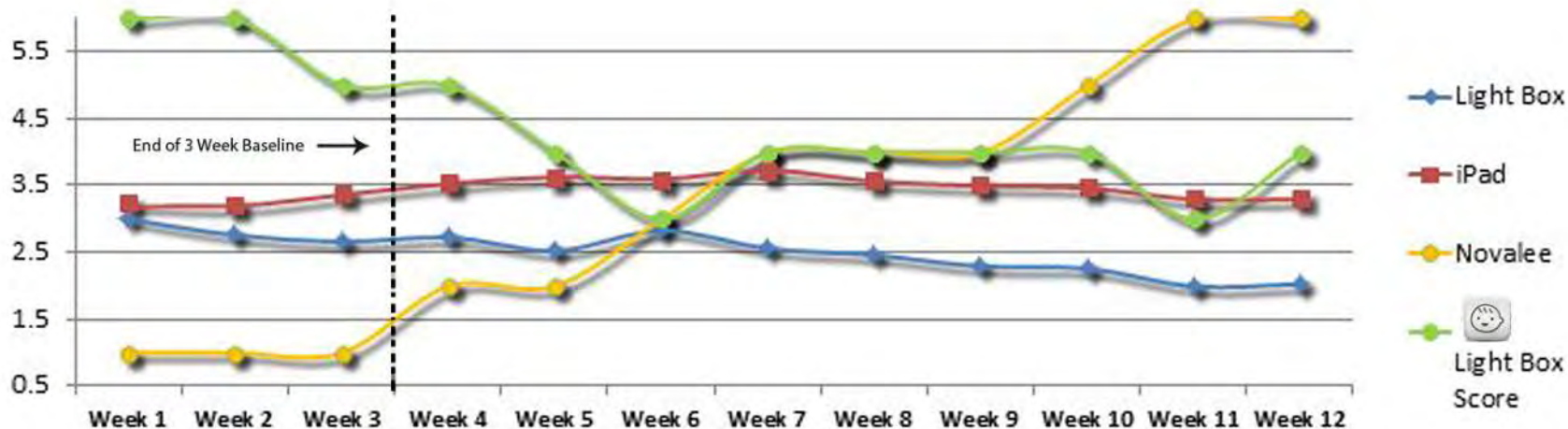


# Results - Length of Engagement

cycle 1



cycle 2



1 - 0-5 minutes

2 - 5-10 minutes

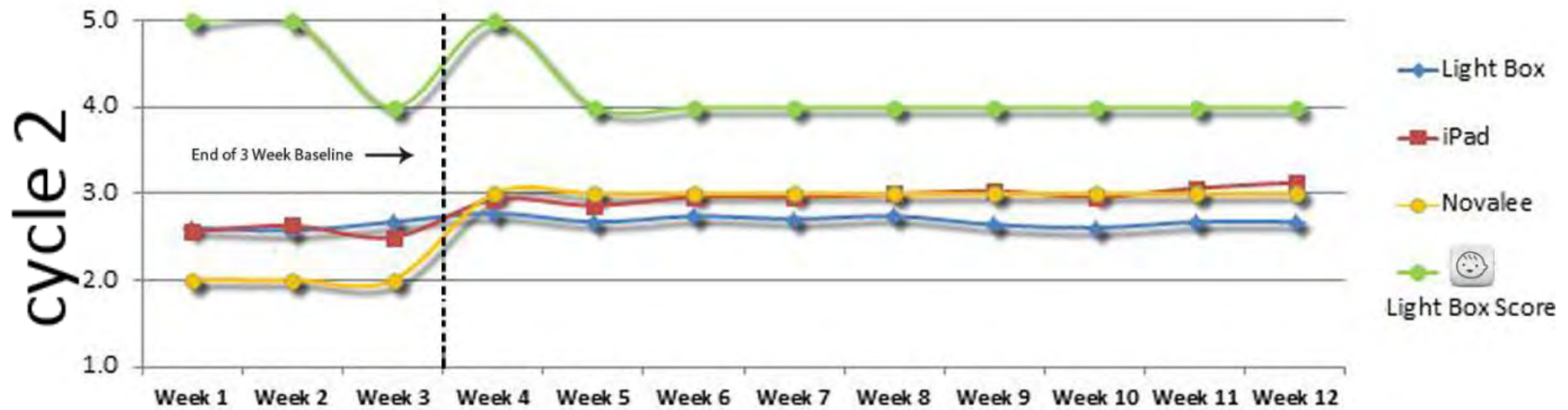
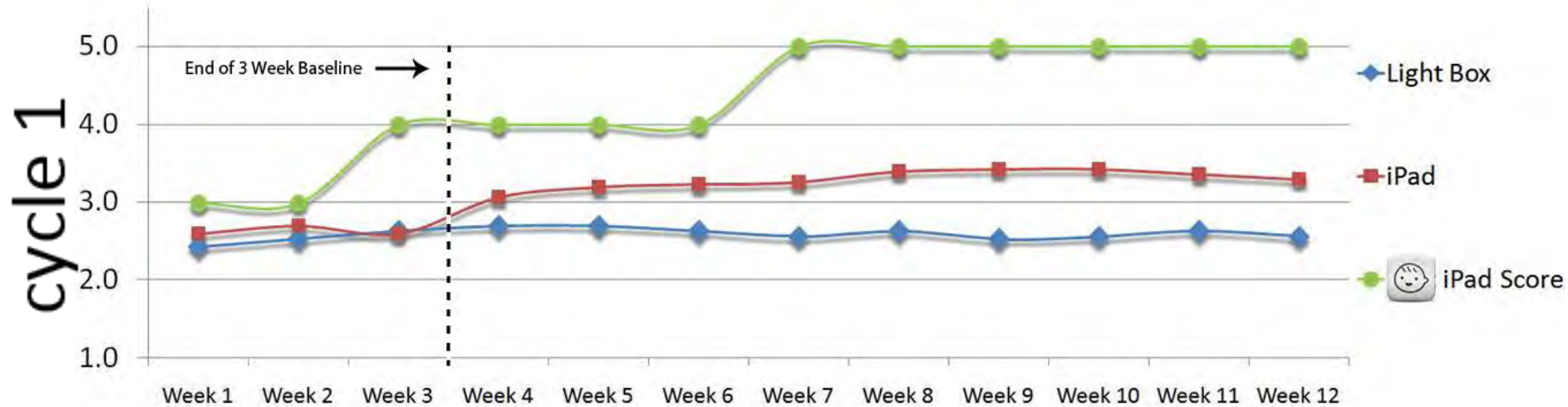
3 - 10-15 minutes

4 - 15-20 minutes

5 - 20-25 minutes

6 - 25-30 minutes

# Results - Communication

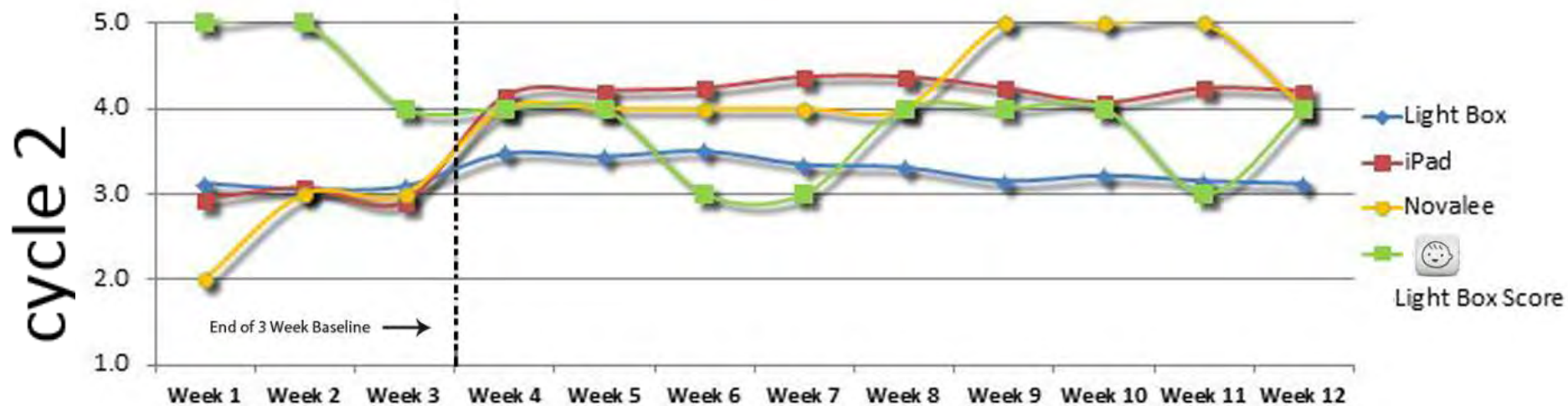
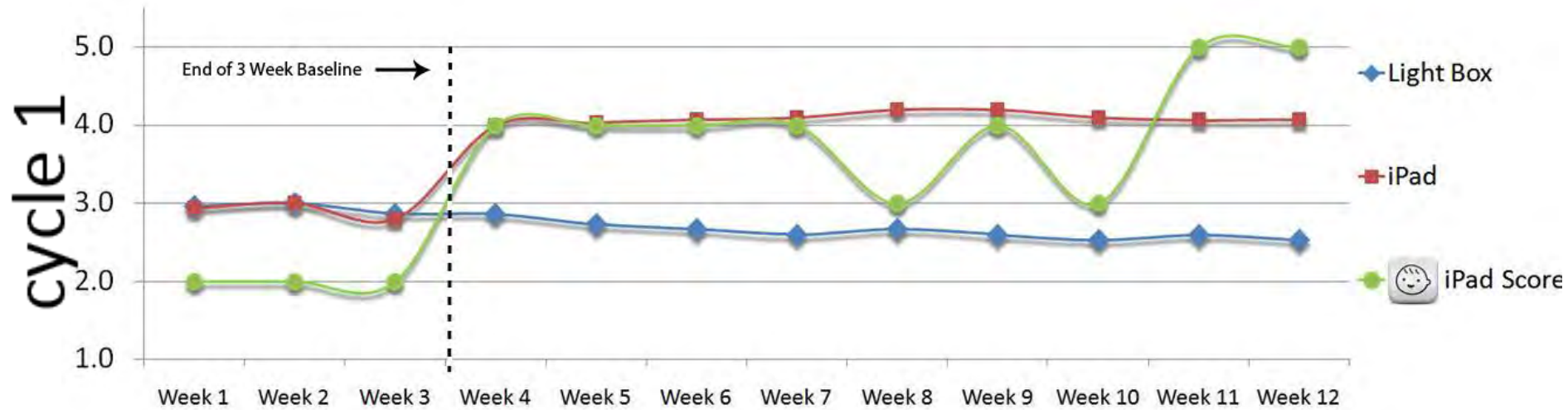


1 - Non Responsive (no response at all)  
 2 - Increased Body Movement  
 (breathing changes, eyes widening,  
 smiling, etc.)

3 - Actual Sounds - Vocalization  
 (babbling, cooing, laughing, etc)  
 4 - Vowel sounds

5 - Clear Verbal Communication  
 (Combination of Vowels to make  
 a word)

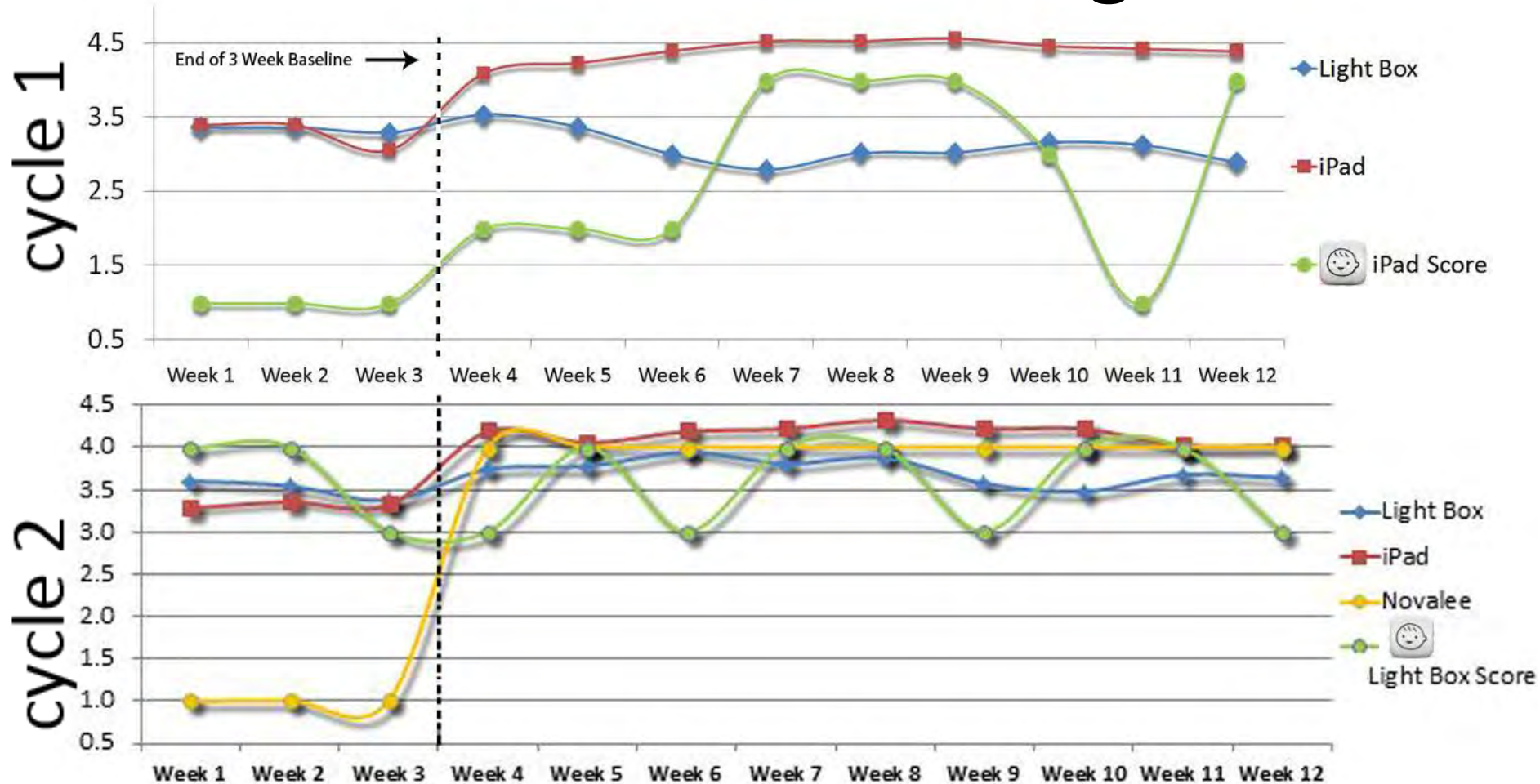
# Results – Visual Attentiveness



- 1 - Non Responsive (No Visual Attentiveness)
- 2 - Somewhat Responsive (Momentary focus and exploring contents on screen)
- 3 - Responsive (tracking items on screen horizontally and vertically)

- 4 - Increased Response (Increase in amount of attention to activity on screen)
- 5 - Fully Responsive (engaged and fully attentive to activity on screen)

# Results - Reaching



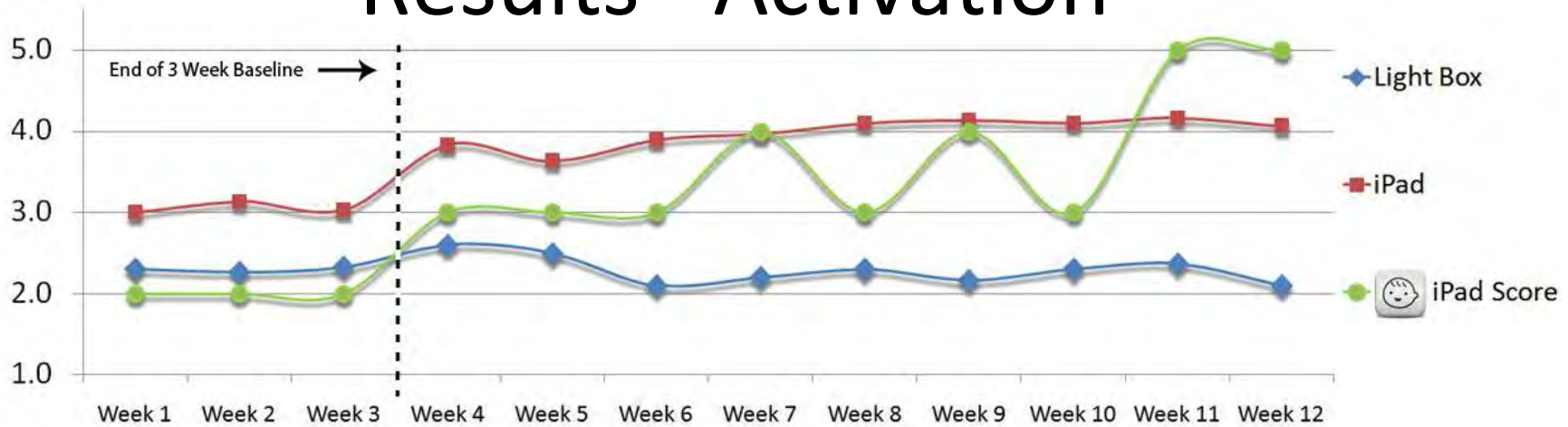
- 1 - No Response
- 2 - Some increased hand movements.
- 3 - Reaching Out (No direction intended)

- 4 - Hand movements in direction of desired object
- 5 - Full reaching to desired object (Grasping and/or landing hand on desired object)

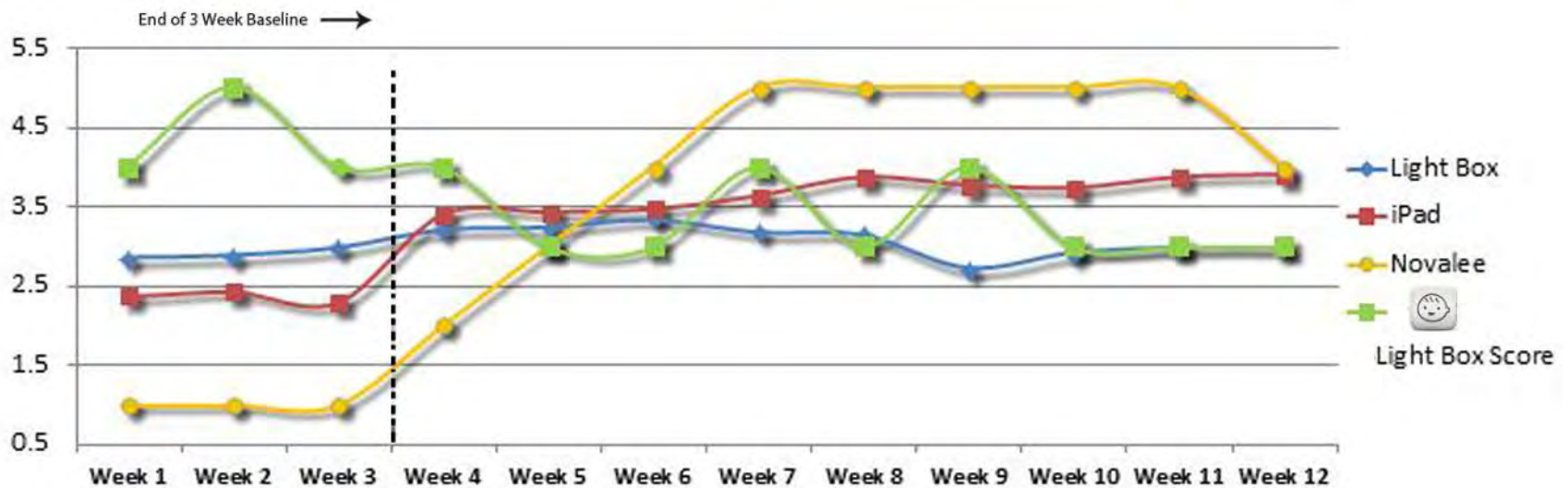


# Results - Activation

cycle 1



cycle 2



1 - No Reaction

2 - Activating Object without specific purpose (10-20% of the time)

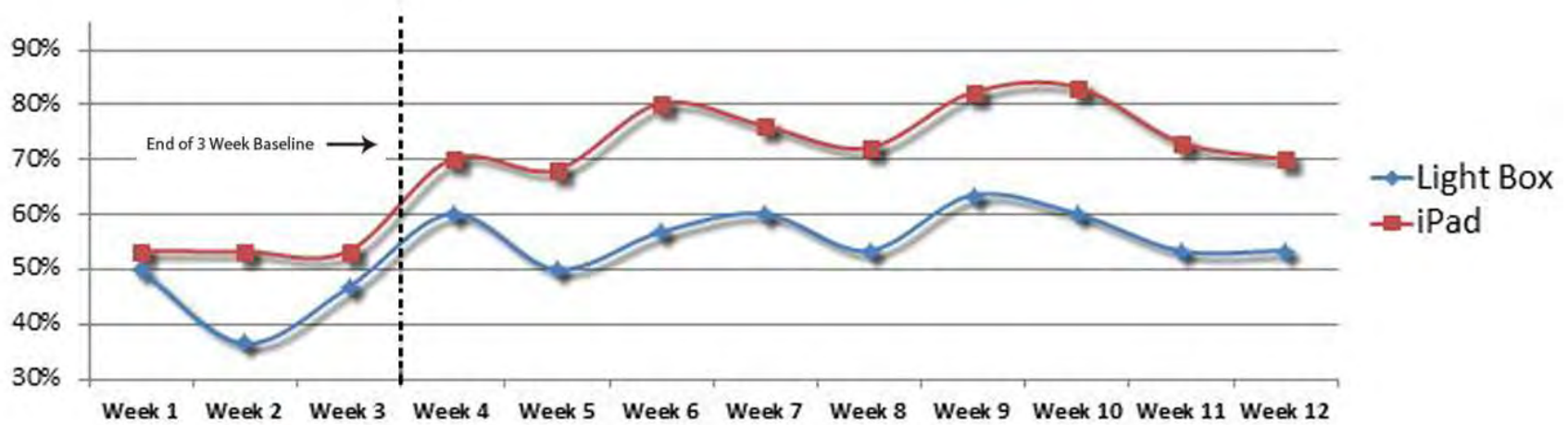
3 - Activating Object without specific purpose (20-40% of the time)

4 - Activating object with purpose half of the time.

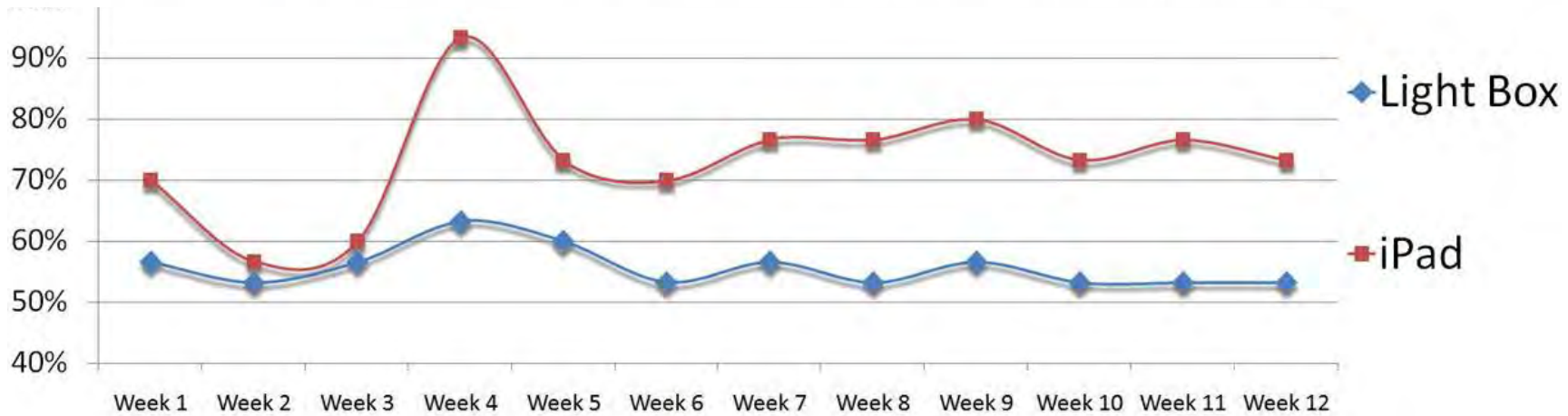
5 - Fully engaged in meaningful activity with object.

# Results - Parent Interaction

cycle 1



cycle 2



# Advantages of the iPad

- Size
- Weight
- Immediate response
- Multiple programs
- Portability



# iPad



The following accessories are included with iPad:



10W USB Power Adapter



Dock Connector to USB Cable

# Applications in our curriculum

- Baby Finger HD
- Bubbles Magic
- Kids Song Machine HD
- Baby's Musical Hands
- Infant Visual Stimulation
- Talking Larry the Bird for iPad

# Baby Finger HD



## Description:

Baby Finger is your baby's best friend!

Every tap of a finger will bring a world of surprise!

Free

Category: Education

Updated: Dec 21, 2010

Version: 1.1

Size: 18.9 MB

Language: English

Seller: Dong Jin Kim

© brainworx

Rated 4+

- Immediate feedback
- Various colors and shapes
- Integration of sound
- White background

# Bubbles Magic



## Description:

Pop! Pop! Pop! Create gorgeous bubbles with your fingers and tap to pop. Delights children of all ages or use it to distract your baby or toddler when you need a few moments of peace.

\$2.99

Category: Entertainment

Updated: Dec 28, 2010

Version: 1.3

Size: 6.6 MB

Language: English

Seller: Squishy Things Inc.

© 2010 Squishy Things Inc.

Rated 4+

- Immediate feedback
- Bubbles change size depending on duration of touch
- Integration of sound
- Interchangeable background

# Kids Song Machine HD



## Description:

The best gift for your children: KIDS SONG MACHINE!  
A fun musical application, that is both stimulating and educational, it's guaranteed to keep your children entertained for hours.

\$2.99

Category: Education

Updated: Oct 04, 2011

Version: 1.0.7

Size: 33.0 MB

Languages: English, Spanish

Seller: Genera Games

© Genera Interactive

Rated 4+

- Immediate feedback
- Use of familiar Children's Music – use in other activities
- Dynamic color



# Baby's Musical Hands



## Description:

Baby's Musical Hands is an award-winning musical toy for babies and toddlers for the iPad, iPhone, and iPod touch.

\$0.99

Category: Games

Updated: Sep 06, 2012

Version: 1.2

Size: 1.5 MB

Language: English

Seller: Streaming Colour Studios

© 2011 Streaming Colour Studios

Rated 4+

- Immediate feedback
- Simple layout of 15 boxes
- Integration of different sounds in each box
- Bursts of light with every touch

# Infant Visual Stimulation



## Description:

Infant visual stimulation is one of the best apps for babies and newborns. It contains high contrast pictures in flashcard format, especially developed for newborns and babies. It provides visual stimulation to help with your child's development.

\$2.99

Category: Education

Updated: Jan 04, 2013

Version: 2.0

Size: 38.0 MB

Seller: Chang Liu

© 2012 Think Design Studio LLP

Rated 4+

- Simple to use
- Various shapes in three contrasted colors of black, white, and red
- Integration of music
- Ability to change screens and manipulate speed

# Talking Larry the Bird for iPad



## Description:

Talking Larry the Bird is your whistling and talking bird friend. Play the piano keyboard and make Larry whistle a perfect tune. Say anything and Larry will repeat.

\$2.99

Category: Entertainment

Updated: Feb 16, 2012

Version: 2.0

Size: 19.7 MB

Seller: Out Fit 7 Ltd.

© Out Fit 7 Ltd.

Rated 4+

- Immediate feedback
- Application listens and repeats sounds
- Use of touch to interact with bird
- Moving bird for tracking

# Top Applications

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Rated 4+

Brody - 6 months

- Diagnosis - Optic Nerve Damage
- Prenatal Intracranial Damage



Andy - 23 months

- Diagnosis - Hypoxic Encephalopathy
- Suffers from Seizures



Jonathan - 26 months

- Diagnosis - Vacterl Syndrome
- Hearing Impairment and Developmental Delays



# How do we rate our applications?

- Response time
- Color and contrast
- Shapes
- Sound feedback
- Ease of use
- Use of motion for tracking



# How do we choose our applications?

- Diagnosis
- Goal-Oriented
- Preference
- Interactivity – (Active/Inactive)
- Purchased Apps – No Ads

# iPad Curriculum DVD

- 12 videos
- In-depth information about our study

for more information

[www.juniorblind.org](http://www.juniorblind.org)



A red pushpin is pinned to the top edge of the yellow sticky note.

Questions  
&  
Comments