August 2019

The best curation database just got better!

Introducing CTREX 6.0

Plus:
Making Technology Play (Chris Byrne)
Ten Years of Virtual Worlds (Scott Traylor)

On the cover: Pango Musical March, reviewed on page 6

Children's Technology Review
EDITOR'S CHOICE
20 19
FOR EXCELLENCE IN DESIGN

Denotes "Editor's Choice."

"Once iPad popularity reach a tipping point in mid 2013 things in the online virtual world space started to change. Scott Traylor, Founder and CEO, 360KID
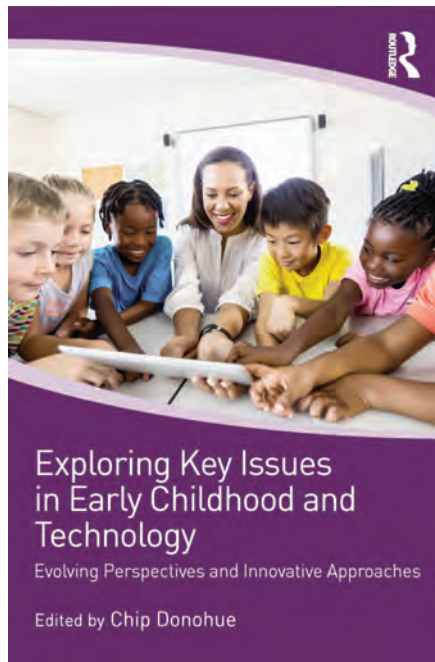
CTREX 6.0 IS LIVE
The most recent update of our review database (at www.ctrex.us) is a big one. We've tried to incorporate as many suggestions as possible, and are happy with the result. Have a look and let us know what you think. Here are the headlines.
• **Better searching.** Besides more speed, we now offer a search algorithm that can be toggled on or off that places emphasis on keywords. You can also control logical operators as well as AND searches to combine search criteria to really drill down your search, with OR Searches to pull up all results for a tag.
• **Award integration.** One click access to the winners and mentions from CTR's two juried award programs (KAPi and BolognaRagazzi Digital Award). This is part of our ongoing effort to bring you objective expert voices.
• **Rubric evaluations.** Products can now be rated with specific rubrics, and you can filter search results by rubric results. You can also see all products evaluated with a particular rubric or make your own rubric from the existing quality attributes.
• **A reward for ethical products.** We now have an ethical seal that is generated by high ratings on the Fred Rogers rubric.
• **Article archive.** You can view CTR Articles published on Medium.com.
• **Improved navigation.** We've rebuilt our search dashboard so that vital commands are included at top of search results and included more paths between related pages. You'll also note a new logged in indicator and more polish throughout.
• **Bookmarks!** Subcribers can keep their own lists using a folder system and a bookmark organizer.

CHIP'S DONOHUE'S THIRD V.I.B. (VERY IMPORTANT BOOK)
It's always a thrill to see your own ideas in print, on real paper. It's even more exciting when your words are bound for life in good company. Such is the case with a new book, out this month from Routledge with the title "Exploring Key Issues in Early Childhood and Technology." The 17 chapter authors were selected in an online poll, and editor Chip Donohue worked tirelessly to mix all the parts into a cohesive volume. My chapter is the last, called "Childhood 2040 - A Wishlist" in which attempt to predict the future, after evaluating a prior prediction I made 20 years ago. Given content inside these covers, there's no doubt this volume will become a must-read for anyone interested in the how technology can affect the lives of young children. Learn more at http://bitly.com/2GF058r

Exploring Key Issues in Early Childhood and Technology

Evolving Perspectives and Innovative Approaches

Edited by Chip Donohue

Dust or Magic

Save the Date!
www.dustormagic.com

Nov 3-5, 2019 • Institute The 19th Annual fall institute is on the books.

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Making Technology Play BY CHRISTOPHER BYRNE

Observations from the Hong Kong Toys and Games Fair

T he Hong Kong Toys and Games Fair in January remains one of the most exciting launch platforms for children's tech in the toy industry. No other international toy show devotes as much space to showcasing new products, and the seminar program brings together experts from around the world to discuss technology and educational trends and how those are influencing product development.

The 45th version of the show, put on by the Hong Kong Trade Development Council, continued to put special focus on STEM, STEAM, A/R, V/R in dedicated areas. The toy industry always reflects its culture, so the number and diversity of the products at the show reflects the emphasis the educational systems in Hong Kong, Mainland China, and most of Asia put on learning through play. Still, while learning is a paramount value, toys still have to be fun.

This year (2019) has seen the maturation of digital play in many respects, and that bodes well for both the products and the play experiences. Gone are the days when just having a device was a thrill for kids, and developers could put out average (or worse) apps that kids would adopt. Gone, too, are the days when an app served primarily as a promotional tool for a property, such as a doll line. With so many apps and choices to choose from—and with limited free time to enjoy them—the competition for the share of the toybox is more intense than ever. Quite simply, the play has to be worth the kids' time.

As part of the maturation of this sector, the biggest trend we'll see this year in digital play is the **integration between a physical toy and a digital platform**. Yes, we've seen that in the past, but this year, there's a lot more sophistication in how that's achieved. Whereas in the past a child's attention might be divided between the physical and the digital interface, basically two concurrent play experiences, some of the more advanced toys coming out make that integration more seamless and interdependent.

Now that we're well into the year, we've had the chance to play with many of these products, and there are some highlights worth noting, in particular because they'll be in the U.S. market soon.

There were fewer Augmented Reality and Virtual Reality concepts for toys than in recent years, but there were some that are noteworthy. Virtual Reality remains a problem for toys for younger children as their perceptual abilities and, of course, shutting out of the environment, doesn't work very well yet. Augmented Reality,

on the other hand, offered some cool applications that served child-directed play. One that I liked was the **Plugo System**. It combines a silicone mat with a variety of geometric blocks. It works with a tablet, and as the app reads the blocks, they show up on the screen. The use of manipulatives in this way fosters exploratory, experiential play and problem solving. There's also a stand with rings on it—think a Dr. Seuss like glove—that allows kids to build simple equations. We found the app very responsive, and the optical technology very accurate. The challenges get more sophisticated as the child plays.

The science company Eastcolight has also expanded its A/R offerings. The company first used A/R in its telescope products, creating an app that helped kids understand what they were looking at in the night sky. It attached to the telescope and outlines the constellations, not always an easy thing for a child to see. In 2019 the app has gotten more sophisticated and works well. The company added A/R to many of its STEM science products. According to Johnny Sze, managing director of the company, the A/R is intended to enhance the basic play experience by overlaying features on, for example, a human torso. The apps can also be updated to add more experiments.

Robotics, of course, remained fascinating and well represented -- with endless rows of booths. One of the most diverse lines came from 4M. The diverse line of robot kids include faces, hands, whimsical robots and many more marketed under the KidRobotix line. We had a lot of fun with the set that *Continued on Page 3*

WHAT IS "SLACKLEASH-ING" AND WHY SHOULD YOU CARE

Imagine if Jean Piaget and BF Skinner met one day at a dog park to take their pups around the pond. BF's border collie would be impressive, with his precise, crisp responses to the stimulus of his master's leash. Piaget's hound, on the other hand, would enjoy the new smells along the path, as his master followed his interests with plenty of give in the leash. This thought experiment led me to create the sport of slackleashing. As my daughter Sarah Buckleitner notes in her blog Feathery Thoughts, it has implications for raising a child. See at http://bitly.com/2GCdjD8

VIRTUAL WORLDS FOR CHILDREN: WHAT TEN YEARS OF DATA TELLS US

In the early virtual world days (2006), when Club Penguin and Webkinz were just beginning to be the biggest online destination for kids, Scott Traylor started collecting online data using a tool called Compete.com. Fortunately for us, he followed this obsession, tracking almost 600 virtual world, with names like NeoPets, Poptropica, WoozWorld, Jumpstart, Wizard101, Roblox, Fantage, Moshi Monsters, Minecraft, and Animal Jam to name a few. As you can see from his graphs, the iPad was a game changer, because it didn't support Flash. See the full article, at
 http://www.360kid.com/blog/2019/07/10-years-of-kids-vw-data/

allows kids to transform a standard 12-ounce beverage can into a robot. The philosophy of the company is "what else can it do?" which is always impressive. The company works with many young designers in Hong Kong, and their exuberance and distinct sensibility shows in the toys.

At the end of the day, the potential of a toy can never be realized until a kid plays with it. Technology alone isn't enough in 2019, a toy has to be fun or it won't be played with. Hong Kong and the Hong Kong Toys & Games Fair continues to take a leadership role in making tech that teaches because kids want to play with it.

Chris Byrne is a KAPi Juror and frequent Dust or Magic speaker.

Ten Years of Cumulative Online Unique Visitor Traffic to Children's Virtual Worlds in the US
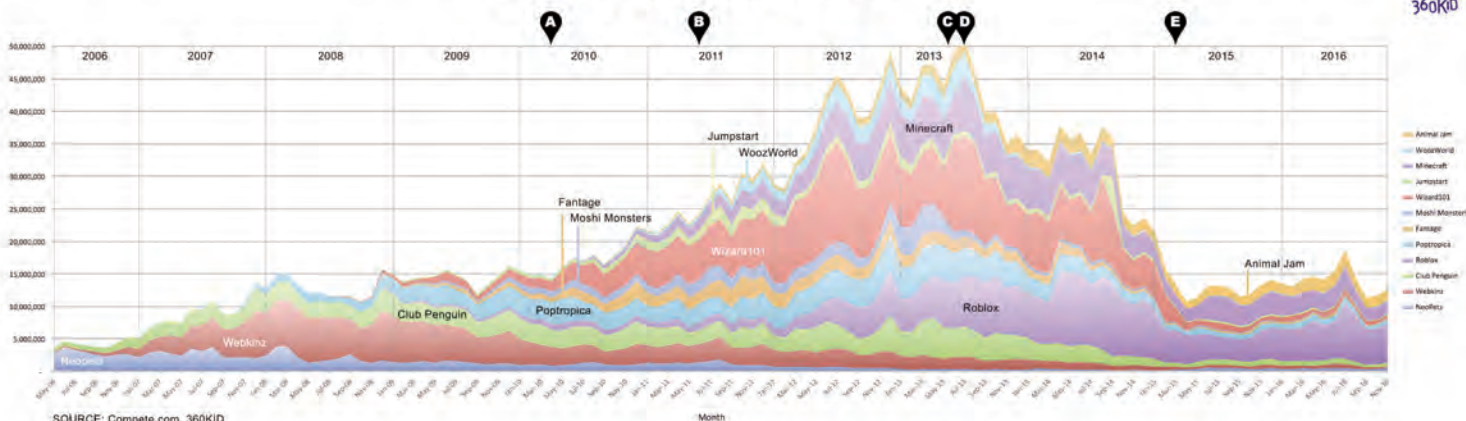
SOURCE: Compete.com, 360KID

A April 3, 2010 - Apple iPad released

B June 2011, **8%** of parents with children ages 8 and under own a tablet device.
Rideout, V. J. (2011). Zero to eight: Children's media use in America. San Francisco, CA: Common Sense Media.

C June 2013, **40%** of respondents with children ages 8 and under own a tablet device.
Rideout, V. J. (2013). Zero to eight: Children's media use in America 2013. San Francisco, CA: Common Sense Media.

D July 2013, **55%** of respondents with children ages 2 to 10 own a tablet device.
Rideout, V. J. (2014). Learning at home: Families' educational media use in America. A report of the Families and Media Project. New York: The Joan Ganz Cooney Center at Sesame Workshop.

E March, 2015, **80%** of 8 - 12 year olds have access to a tablet in the home, and **53%** of 8 - 12 year olds own their own tablet.
Rideout, V. J. (2015). The Common Sense Census: Media Use by Tweens and Teens. San Francisco, CA: Common Sense Media.

Scott@360KID.com

Feature Reviews and New Releases

AUGUST 2019

Here's an alphabetical listing of both the feature reviews (with ratings) and the new and future releases. "Entry Date" refers to the date we first learned of the product.

Playbits

This is a screen-free, snap together robotics kit that is compatible with larger LEGO-sized blocks. The kits range is size and price, depending on components. One unique component is a light up wand that provides feedback through LEDs, sounds and spoken text. We tried a number guessing game. There is also a Braille set of activities.

Costs range from $30 to $150. Made in India. Play

Details: Robotix Learning Solutions Pvt. Ltd., www.robotixedu.com. Price: $150. Ages: 5-up. Platform: . Teaches/Purpose: Braille, coding, STEM, robotics. Entry date: 3/8/2019.
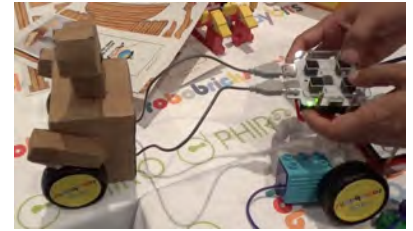
My City: Pajama Party

The My City series keeps expanding, with a sleep over theme. This app contains 20 characters and six locations that let you dress up, cook, listen to music and arrange hundreds of items. It is possible to move the characters between other My City games. There is an underlying collecting theme designed to keep you coming back. Features include a night/day option, and the ability to give the characters emotions.

Details: My Town Games, http://www.my-town.com. Price: $2.99
. Ages: 4-12. Platform: iPhone iPad, iPad, iPhone, Android, Kindle. Teaches/Purpose: creativity, language experience. Rating (1 to 5 stars): 4.3 stars. Entry date: 6/17/2019. []

Ease of Use	9	86 %
Educational	8	
Entertaining	9	
Design Features	8	
Good Value	9	

Phiro Pro

Designed for use in schools, this robotics kit from India works with mobile devices or computers via bluetooth. You can program your robots using mainstream languages like Scratch, or you can use a Robotix language called Phiro Pocket Code. Includes a set of optical cards. The kit is LEGO block compatible. The kit was on display during Toy Fair 2019. Made in India.

Details: Robotix Learning Solutions Pvt. Ltd., www.robotixedu.com. Price: $call. Ages: 6-18. Platform: . Teaches/Purpose: coding, programming, robotics, creativity. Entry date: 7/3/2019.

Pepi Wonder World

Here's another "world" style sandbox (or dollhouse) type of app where you can interact with over 60 fantasy characters, including castles, ghosts, queens and so on. Think Toca Life, only with dragons. Other content includes musical instruments that play if they are put in the hands of one of the characters, gems, keys, food, bows and catapults. You can find hidden keys required to unlock closets, or hatch eggs to get baby characters. To get to another island, you can take a boat, or use the home icon. Pepiplay is a family run studio based in Lithuania.

Details: Pepiplay, www.pepiplay.com. Price: $2.99. Ages: . Platform: iPad. Teaches/Purpose: Pretend play. Rating (1 to 5 stars): 4.4 stars. Entry date: 7/8/2019. []

Ease of Use	9
Educational	8
Entertaining	9
Design Features	9
Good Value	9

88 %

Cosmic Cubs DressUp

A playful dress up play theme is based on an outer space theme. You can choose different backgrounds, scenery, colors and cubs. The interactive design is rough, and the plentiful illustrations appear randomly on the screen when selected. A drag and drop mechanism would work much better, as well as a better menu design. It is possible to save work as an image. Made in Unity. Cus

Details: Cosmic Cubs, www.cosmiccubs.com/. Price: $1.99. Ages: 3+. Platform: App for all Apple iOS and Android OS devices, iPad, Android. Teaches/Purpose: creativity. Rating (1 to 5 stars): 2.7 stars. Entry date: 7/9/2019. []

Ease of Use	6
Educational	5
Entertaining	6
Design Features	5
Good Value	5

54 %

Cosmic Cubs Eco Puzzles

Cosmic Cubs Eco Puzzle App or iPhone and iPad or Android phone or tablet. The App boasts 24 different puzzles.

Details: Cosmic Cubs, www.cosmiccubs.com/. Price: $1.99. Ages: 3+. Platform: App for all Apple iOS and Android OS devices, iPad, Android. Teaches/Purpose: logic, sliding puzzles. Rating (1 to 5 stars): 2.9 stars. Entry date: 7/10/2019. []

Ease of Use	6
Educational	6
Entertaining	6
Design Features	5
Good Value	6

58 %

Cosmic Cubs Space Puzzles

A set of simply designed astronomy themed jigsaw puzzles, each with generic facts (reading required). Content includes the planets, moons, asteroids, meteors, comets and the Milky Way. Made in Unity.

Details: Cosmic Cubs, www.cosmiccubs.com/. Price: $1.99. Ages: 3+. Platform: App for all Apple iOS and Android OS devices, iPad, Android. Teaches/Purpose: logic, jigsaw puzzles. Rating (1 to 5 stars): 2.7 stars. Entry date: 7/10/2019. []

Ease of Use	7	54 %
Educational	7	
Entertaining	5	
Design Features	4	
Good Value	4	

Nintendo Switch Lite

Nintendo Switch Lite is a smaller, lighter, cheaper (by $100) Nintendo Switch system dedicated only to handheld play. This means some games -- such as those that need a large screen, or that might use rumble features that require the removable controllers (like 1 2 Switch) won't work.

The unibody unit comes in three colors, and has a built-in +Control Pad. It does support multiplayer online play as long as you have a Nintendo account. The touch screen is slightly smaller that the regular Switch, and the batteries are slightly better (Nintendo says 4 hours for a Legend of Zelda game). The unit comes with it's own charger, and is not compatible with Nintendo Switch dock. It does not support any output to a TV. Therefore, it does not come with a dock, HDMI cable or kickstand. Release date September 20, 2019.

Read more at http://bitly.com/32npEEv

Details: Nintendo of America, www.nintendo.com. Price: $200. Ages: 5-up. Platform: . Teaches/Purpose: A handheld game console. Entry date: 7/10/2019.


Beasts of Balance

This is a multiplayer physical stacking game combined with cards, an app, and AR features. As you add tower elements, you see them appear in the app.

The challenge is to stack creatures in towers that can fall over, mimicking other similar block stacking games. What's different is that the app watches your structure (each block acts like a QR code) so every time you add an animal to the tower (or it falls) your virtual world responds. Content includes 600 virtual creatures and 24 stackable physical creatures (called Artefacts), two game modes (co-op for up to five players and battles for 2-3). Requires a Beasts of Balance game set to play. Note that the core kit costs $50. Different expansion items bring the actual costs to over $100. Learn more at https://beastsofbalance.com/

Details: Sensible Object, http://sensibleobject.com/. Price: $50. Ages: 7-up. Platform: iPad, Android. Teaches/Purpose: fine motor coordination, logic. Entry date: 7/17/2019.
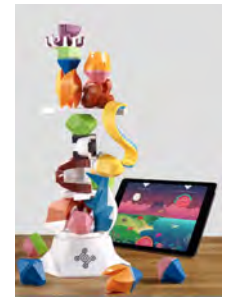
Pango Musical March

Freely mix and match melodic and rhythmic elements in this well designed music creativity experience. You start by choosing from 40 instruments that are organized by four music styles -- Latin, Asian, US or synthesizer. Next, you drag and drop the members of the marching band into place on a side-scrolling three column grid. There are two control tabs -- one for selecting sounds; the other for controlling the speed and pace. As your music plays, decorations appear on the screen. Some of the secondary sound effects are distracting, and we would've liked a smoother character selection process. But these are minor issues for an other excellent app.

Details: Studio Pango, www.studio-pango.com. Price: $2.99. Ages: 4-up. Platform: iPad, iPhone, Android. Teaches/Purpose: music, melody, rhythm, timing, harmony. Rating (1 to 5 stars): 4.5 stars. Entry date: 7/19/2019. []

		90 %
Ease of Use	9	
Educational	9	
Entertaining	9	
Design Features	9	
Good Value	9	

Harry Potter: Wizards Unite

Imagine Pokémon Go, only with Harry Potter characters. Created by Niantic and WB Games this is another "free" (with IAP) geolocation game. The idea is the same -- you use your iOS or Android smart phone (data plan required) to wander around your neighborhood in search of JK Rowling-inspired characters.

In the story, a calamity has happened to the wizarding world, causing Foundables —creatures, people and memories—to appear in the Muggle world. As you explore, you find traces of magic that indicate the location of Foundables. These Traces are found at various real-world locations and trigger 3D encounters in 360-degree AR. If you work with other players, you have more strength, as you participate in Wizarding Challenges (real-time cooperative multiplayer battles against dangerous foes). Players take on professions—Auror, Magizoologist, and Professor; each with special skill sets. Learn more at https://www.harrypotterwizardsunite.com/

Details: Niantic, www.nianticlabs.com. Price: $free with IAP. Ages: 7-up. Platform: . Teaches/Purpose: geography, problem solving, logic, maps, reading, classification. Entry date: 7/24/2019.