



Children's
TECHNOLOGY
REVIEW EXCHANGE

January 2018

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our 28
favorites
from 2017

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KAPi Awards!



Debate:
Should YouTube care about
children?

On the cover: Facebook Messenger by Facebook

Children's Technology Review
January 2018

Volume 26, No. 1 Issue 215

Abigail's Tales: First Day
Bandimal*
Circuit Conductor - Electricity
Learning Kit
Color Clues

Hopster TV and Learning Games
KinderReady
Logitow
Puzzle Shapes - Building Blocks*
Raspberry Pi Smart Robot Car
Kit
Seed Studio Grove Zero STEM
Starter Kit
Vroom



** Denotes "Editor's Choice."*

"If you're using something for free, you are the product."

That's how Bill Shribman, Sr. Producer & Director of Digital Partnerships at WGBH ended his recent Dust or Magic talk, called "Kids, Media, News and Media Literacy."

Shribman starts with the question "what does modern media literacy need to look like in a mobile world with fake news and an endless sea of information?" The 30 minute talk can be viewed at <https://youtu.be/FDM3F9SgHx4>.



SUMMARY: In the past, you could use the "CRAP test" to tell if information was real.

- C = Currency
- R = Reliability
- A = Authority
- P = Purpose/Point of View

But, Shribman asserts, these are different times, and we must help children move beyond the CRAP test. He showed us a fake Associated Press (AP) tweet that announced that there has just been an attack on the White House. Every part of the tweet could pass the CRAP test, but the tweet was created by hackers.

The bottom line is that we really don't know at what level everything that is being fed to us is being customized and/or manipulated for some reason. For example, you can find out what Facebook thinks you are, with <https://www.facebook.com/about/preferences>

LITTLECLICKERS: SNOW WONDERS

Snowflakes were falling outside our New Jersey window as we created this month's LittleClickers column about snow. Have a look at www.littleclickers.com/snow

ANNOUNCING THE 2018 KAPI AWARDS

See page 4 for the winners, or visit www.kapiawards.com

YOU ASKED: SO HERE ARE 28 FAVORITE PRODUCTS FROM 2017

We summarize some trends (both good and bad) and hand pick 28 important products from the past 12 months that you need to know about. See page 5.



Save these dates!
www.dustormagic.com

March 25, 2018 • Bologna Masterclass Meet and debate cur-

rent technology with children's publishers at the world's largest children's publishing event.

June 1-3, 2018 • AppCamp The West Coast edition of Dust or Magic, at the Asilomar

Conference Grounds. \$1480/seat.

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5 (or so) sites & 10 videos

Snow Wonders

Read this column online, with links, at www.littleclickers.com/snow

How many snowflakes fall every second? Is it true that no two snowflakes are alike? Ever wonder how they make artificial snow for ski resorts? Let's learn more about the wonders of snow.

1. T/F No two snowflakes are alike. Find the answer at bitly.com/2Cz8yKm to learn from snowflake scientist Kenneth Libbrecht. He says "it's unlikely that any two large snow crystals have ever looked completely alike." But he admits, there's no way to actually find out. Who can look at every snowflake? See what a snowflake looks like at <http://www.snowcrystals.com>.



2. Can snow keep you warm? Yes. Freshly fallen snow is typically 90 to 95 percent air, which is what makes it a good thermal insulator. Get a sleeping bag and learn how to make a snow cave, at bitly.com/2CDmVxm

3. Take a guess... how many snowflakes fall every second? The answer is about a million-billion snowflakes, averaged over a typical year around the world. That's enough for one snowman for every person on earth, every ten minutes, according to <http://www.snowcrystals.com/facts/facts.html>

4. What does dust and snow have in common? According to Discover Magazine bitly.com/2IP9IXU there's a tiny spec of dust at the center of every snowflake. It can be anything from volcanic ash to a particle from outer space. Think about that before you eat some snow!

5. What are the dangers of snow?

Snow can be deadly when it blocks vision, falls on you in an avalanche <https://youtu.be/dYx9wbCs114> or causes a heart attack when you try to shovel it nyti.ms/2E3urhl. So be careful.



APPLICATION

How much water is inside of snow? Get a jar and pack it with snow. Make a guess with bit of tape. Then melt the snow to get your answer. bitly.com/2lRPo7d

Make a Snow Fish!

Everyone makes a snowman. Why not a giant snow fish that will stop traffic? Simply watch this YouTube video



<https://youtu.be/fXM08IHwaKc>.

You'll need some shovels, a sled and a wooden frame; plus a lot of friends. Some lighting effects and cold weather help a lot.

Snow Wonders on YouTube

Want more? Here's a video playlist that go along with this column

https://www.youtube.com/playlist?list=PLcBVHzUUEKwk9ao_hVvBtkRPIbTbmhK7



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2018 KAPi Award winners



The envelope, please! Next week in Las Vegas, we'll present awards to the following products and people. Our thanks to CES and the jurors (Mark Schlichting, Chris Byrne, Barbara Chamberlin, Dan Nessel, Mary Couzin, Tonda Sellers, Amanda Gummer and especially Robin Raskin) for making this award possible. After considering over 500 products and people, here are the winners.

Best App (Younger Children)

Sago Mini World, Sago Mini. It took a small Canadian team of designers, many of them parents themselves, to create this safe, vibrant home for the very first tech users. The unique subscription model is commercial free, and packed with updated things to discover.

Best App (Older Children)

Messenger Kids, Facebook. Many have tried but few have succeeded to fulfill a family's desire to let their young children have access to messaging. After copious research and careful attention to privacy and permission, Facebook's powerful Messenger Kids will open a much-needed line of communication between children and parents. We applaud this type of leadership.

Best Peripheral Kidizoom Smartwatch DX2, VTech. Our judges agreed: the Kidizoom 2017 smartwatch bests the competition in the kid's wearable category. There's no GPS for tracking, but the two cameras, color touch screen, motion/step counter and suite of games make this affordable peripheral an ideal first watch for any child. And it tells time.

Best Content Distribution WOW in the World Podcast for Kids by Tinkercast on NPR. "Where does an astronaut poop?" NPR's Guy Raz and Mindy Thomas have the answer to this, and many other important questions in this podcast specifically designed to delight kids (and their parents).

Best AR/VR Application Merge Cube, by Merge VR. VR and AR apps and toys were easy to find this year. Tools like Apple's AR kit have created an endless stream of exciting new kids' products. Merge VR rises to the top by giving children a concrete prop that they can hold in their hands. We've seen kids lining up to try it out.

Best Maker Product Circuit Cubes, Tenka Labs. Simplistic fun that turns a consumer into a creator right out of the box. Unlike the other maker kits that were released this year, Circuit Cubes is designed to play well with other brands of toys, from stuffed animals to Tinker Toys to LEGOs.

Most Creative Beasts of Balance, Sensible Object. Jurors loved this clever balancing act (literally) between physical, stackable building parts and AR. Warning -- this game can get addicting.

Award for Innovation Lenovo Star Wars Jedi Challenge, Lenovo. OK, let's admit it. We all want to have our own lightsaber. Lenovo has created a combination headset, app, beacon and light saber that comes close to pulling you right into your own battle.

Best Physical/Digital Merger LEGO Boost, LEGO. Build one of five variations of a robot with this LEGO's kit, program it using a simple block-oriented language, and then enjoy your play session with your new interactive creation. This clever leveraging of the LEGO brand offers kids a seamless way to code, build and play.

Best Thing that Flies Aura Drone with Glove Controller, KD Group. We love it when a toy makes feel like you have magical powers. This drone comes with a glove that turns your hand into a motion controller. There are even haptic features so you can feel the power.

PIONEER AWARDS

Emerging Pioneer: Vikas Gupta, creator of Wonder Workshop. Vikas Gupta had a perfectly lovely life as the Head of Consumer Payments at Google, but his vision of creating playmate robots that would teach kids how to code was his passion. With Dot and Dash, a robotic duo, and the new Cue, that has emotional intelligence and personality, he's taught countless kids about the joys of coding.

A sad postscript. When all the votes were counted, Markus Persson, aka The Father of Minecraft was selected to receive the LEGEND KAPi award -- our highest honor. But we looked into his background (you can too... just search on his name and read a few of his tweets). Sadly, Mr. Persson's use of social media to bully others made us remove the award. Our conclusion is that you can be lucky, brilliant and make a great product. But if you behave badly you can't win the Pioneer KAPi.



You asked: So here are 28 favorites from 2017

by Warren Buckleitner



2017 will go down as the year when VR, AR, HDMI, 4K and Bluetooth LE quietly slipped from novelty to mainstream. Driven by the continual undercurrents of cheaper, faster microprocessors, our tech toys and tablets have also become cheaper and faster, and the result is more power for young hands. Said another way, \$40 in a toy store can buy a much better drone than it could last year.

These continual hardware improvements have helped to narrow the quality gap between Apple and rest (namely Google and Amazon). Consider the \$400 Acer Chromebook, with a multi-touch screen that can deliver both Google docs and Toca Boca. We liked Amazon's \$130 eight inch Fire HD Kids Edition as well, and the big leaps this year in AR (Augmented Reality) can be attributed to improved developer tools like Unity and ARKit. So from a hardware point of view, 2017 was a good year.

With power comes responsibility. We watched as profit motivated companies exploited curious children to increase traffic and their revenue. We sat in on an Apple developer event called "how to make great apps for kids" and came to understand that Apple defines "great" as increased revenue.

They know what any supermarket owner understands. Putting candy in the checkout lane increases revenue. Today's candy is free apps with IAP (In App Purchases) and spicy YouTube videos that serve up page views and ads. As a result, a parent in 2017 has to worry more than ever when their child is alone with a connected screen.

2017 was the year when a popular YouTuber (followed by many children) created a video involving a Japanese suicide victim (see the coverage from Wired, at <https://www.wired.com/2017/03/youtuber-rail-gutierra/>). Rail Gutierrez, CEO of Tinybop is the father of two young boys. He wrote of the Children and Media Professionals Facebook page, "YouTube knows a huge portion of its audience are kids/teens and they have massive influence over what kids watch via their algorithms, but take little responsibility for effects of pushing millions of kids to algorithmically ranked garbage. **The fact that YouTube is designed as an adult site doesn't remove that responsibility.** I believe sites are responsible for their communities and their content even when it's user-created, and especially so when they have massive audiences." We agree.

And there's 2017's fake news. As Bill Shribman points out in his Dust or Magic talk, we must prepare the next generation to move beyond the "CRAP" test in order to project the basic foundations of democracy. See his talk at <https://youtu.be/FDM3F9SgHx4> to learn what the CRAP test is. Some other top line trends:

- 2017 also saw a marked decrease in the number of original, high quality children's apps, as several key publishers simply gave up in the face of a dime store app store culture that rewards free trials, subscriptions and in app purchases.
- It's becoming very common for a toy or book to have an accompanying App. That means a child will need a connected smart phone or tablet to play along creating a continued economic divide.
- Coding is hot, as are snap together electronic kits. But as Mitch Resnick warns in his Dust or Magic talk, it is important to know the difference between puzzles and powerful coding experiences. If you haven't watch his talk "Fulfilling Papert's Dream" take the time... <https://youtu.be/Ofvh3haFp9w>



• Toca Boca continues to lead, by creating fun, easy to use touch and explore experiences. The Toca Life series is perhaps the year's biggest app success story.

• Nintendo Switch was 2017's biggest hardware winner. It illustrates how a novel, untested design pays off. Nintendo designers were the first to successfully bring small and big screen experiences. Another choice is proof that parents will happily pay \$50 for an experience they trust.

The most important observation from the past 12 months is that there are still amazing products to be found. So, for this first issue of 2018, we present both the 2018 KAPi Award winners (on the previous page) and the 28 noteworthy 2017 Editor's Choice products from the 197 we reviewed. Each has a link to the full CTREX review, if you want more information.

Acer Chromebook Spin 11

This is an excellent, powerful, affordable option for the growing number of students who rely on Google services. Features include a hinge that lets the 11.6-inch work like a tablet and a screen that is antimicrobial. Learn more at <https://www.acer.com/ac/en/US/content/model/NX.GNJAA.002> Details: Acer of America, www.acer.com. Price: \$400. Ages: 3-up. Platform: Android. Teaches/Purpose: a tablet/laptop. CTREX Link (please comment): <http://reviews.childrenstech.com/ctr/fullreview.php?id=19717>

Bandimal

Tricky but empowering and fun -- this sound mixing experience turns your iPad or iPhone into an eight bar mixing machine. It comes from respected app creator/musician Lucas Zanotto (see Loopimal or Miximal). After you tap an animal, you see a confusing mix board, full of controls. It's easy to make a looping mess, but the app is saved by its responsive graphics and your ability to undo whatever you do. We especially liked how the animals animated moves exactly mark the rhythms. Content includes nine animals, each with a dif-