

# Innovative Technology for Individuals with Autism

Christian Karter, MA  
Educational Technology  
Specialist

# Who am I?

- Monarch Center's Educational Technology Specialist.
- I have worked for Monarch Center for Autism for 12 years. In the classroom and in my present role.
- I also worked for Monarch Teaching Technologies and helped design early elements of VizZle.
- My chief responsibilities are the data system and introducing new technology into the classrooms.
- Contact [karterc@bellefairejcb.org](mailto:karterc@bellefairejcb.org).



Christian Karter MA

# I am also a parent

- Our son Logan was diagnosed with Autism at the age of 22 Months. He is now 4 1/2.
- We noticed signs around 16 months.
- Logan receives a mix of behavioral and speech therapy.
- We introduced an iPad with a mix of Educational Apps and Speech apps at the Age of 2.
- Logan is now speaking in sentences and loves to tell people about his day and train sets he is going to build.







# Classroom Technology



# Apple iPad

- At Monarch Center we use approximately 180 iPads.
- The iPads are assigned to Teams, SLPs, Behaviorists, OT's, and students directly.
- We use a mix of different versions of iPads.
- iPads have been a great boon to our schools educational resources as it allows us to be more mobile with our teaching.
- They serve as a wide variety of uses such as educational apps for the student's, reinforcers, visuals such as schedules and token boards, data collection, photography and video capturing, and much more.
- Current purchase trends towards iPad 6<sup>th</sup> Generation as lowest cost and it supports the Apple Pencil, great for OT's and art.



# Tablets Personal or ?

- When economically possible a communication Tablet/iPad should never be the same device as the one they play on.
- Communication device should be visually distinct. Use color coded cases.
- Communication device should only have their Communication app loaded on it.
- Make use of such functions as Guided Access to Lock their Communication App into place.
- Always have a form of backup running on their device such as iCloud or Dropbox.



# MoKo iPad Mini 4 Case

- Very affordable case and durable.
- Comes in 6 colors
- Recommend using with a screen protector to protect against scratches
- Carrying handle, also converts into a 2 way stand when propping up on a table.
- Con: Screen not directly protected from impacts.
- [https://www.amazon.com/gp/product/B0146MZ1FG/ref=oh\\_aui\\_detailpage\\_o04\\_s00?ie=UTF8&psc=1](https://www.amazon.com/gp/product/B0146MZ1FG/ref=oh_aui_detailpage_o04_s00?ie=UTF8&psc=1)

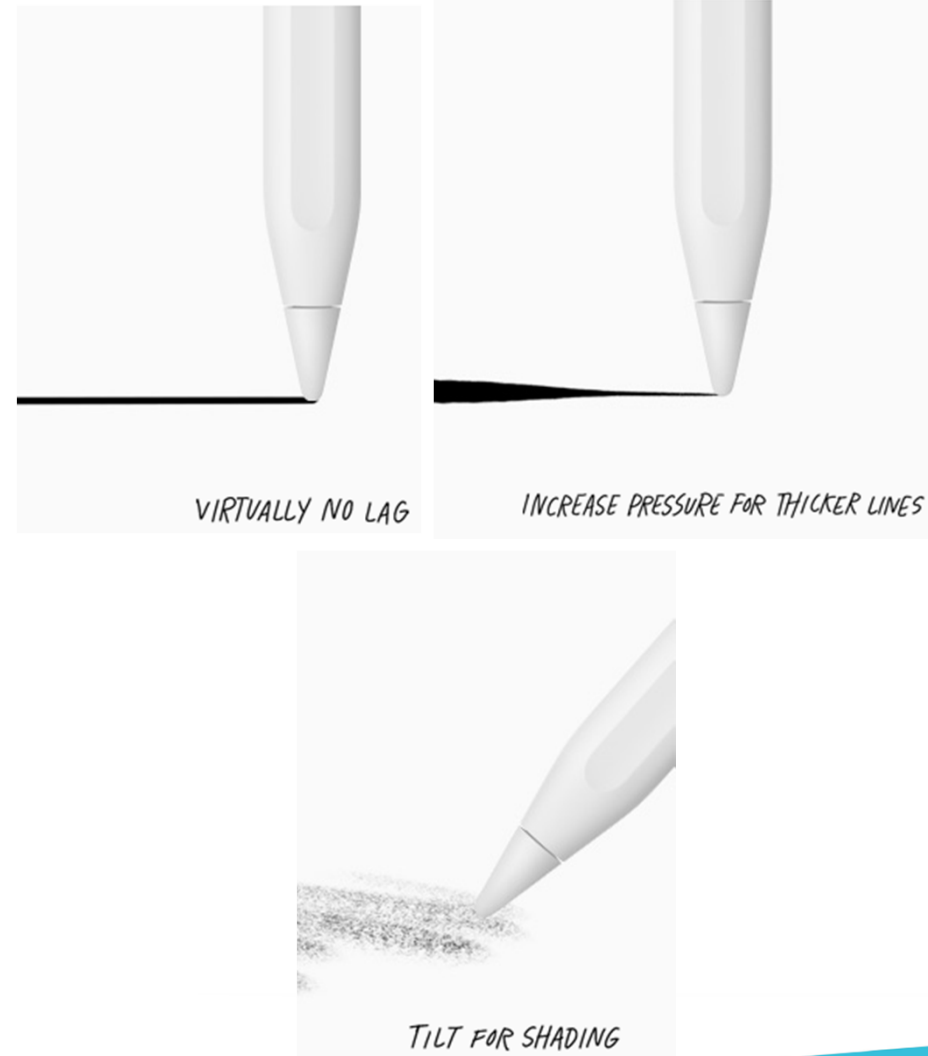


Price: \$13.95



# Apple Pencils

- Apple Pencils are great for OT's, Art teachers, and students taking notes.
- There are 2 models both allow you to draw and write on an iPad. The model depends on which iPad you are using.
- They are pressure sensitive giving more of the feeling like you are using a real pencil.
- When using the pencil the can rest your and on the display without the display activating.



# Apple Pencils



Apple Pencil for  
iPad Air (3rd generation),  
iPad mini (5th generation),  
iPad (6th generation),  
iPad Pro 12.9-inch (1st and 2nd generations),  
iPad Pro 10.5-inch,  
and iPad Pro 9.7-inch

Lightning pairing and charging

Price: \$99



Apple Pencil (2nd generation) for  
iPad Pro 12.9-inch (3rd generation)  
and iPad Pro 11-inch

Automatic pairing, wireless charging,  
and magnetic storage

Double tap to switch tools

Tap to wake

Price: \$129

# Android AAC

- Amazon's Fire tablets are android devices.
- Android has a large Market place of Apps through the Google Play store.
- Unfortunately none of the big name in AAC apps such as Touch Chat or Proloquo2Go are available for Android devices.
- Dynavox T10 is an android based tablet with their Tobii software loaded on to it.





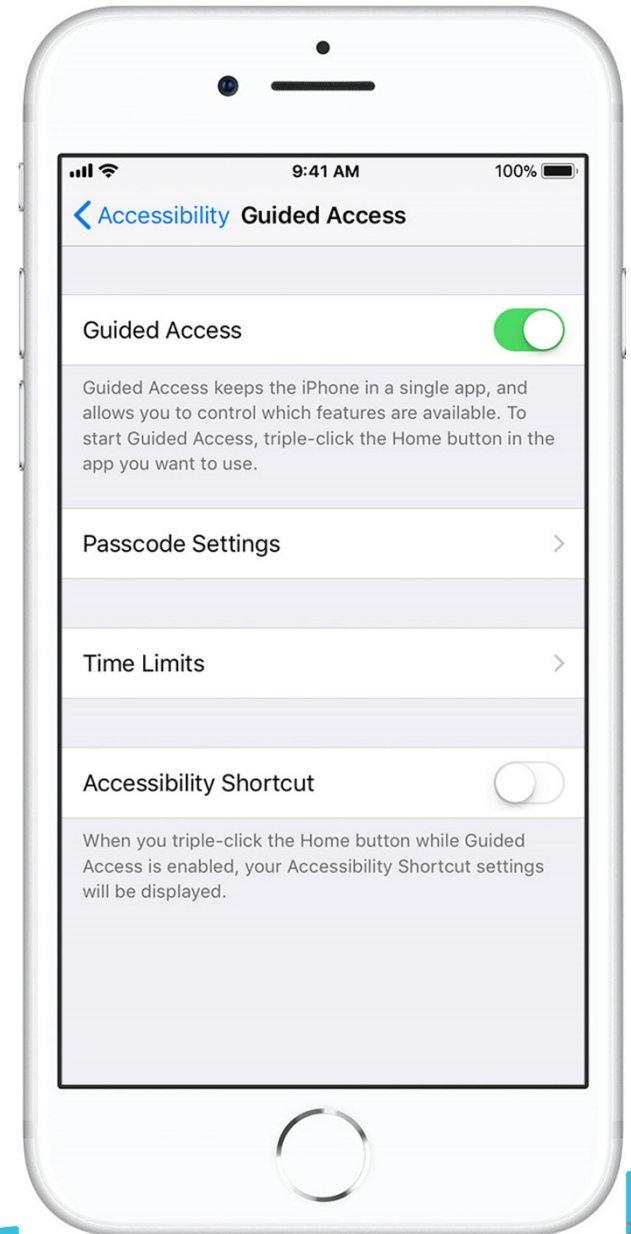
# iOS Screen Time

- iOS screen time was previously the restrictions settings, but now it has parental control features that allow you to monitor how much time the individual is using their device.
- Breakdowns by individual apps can be seen of how much time has been spent on them.
- You can have weekly reports sent to you.
- Article explaining Screen Time and how to set it up.
  - <https://support.apple.com/en-us/HT208982>
- Recommend setting up an iCloud Family account with yourself as the Moderator - you can monitor other accounts and modify restrictions from your own device.
- Setting up Family Sharing
  - <https://support.apple.com/en-us/HT201088>



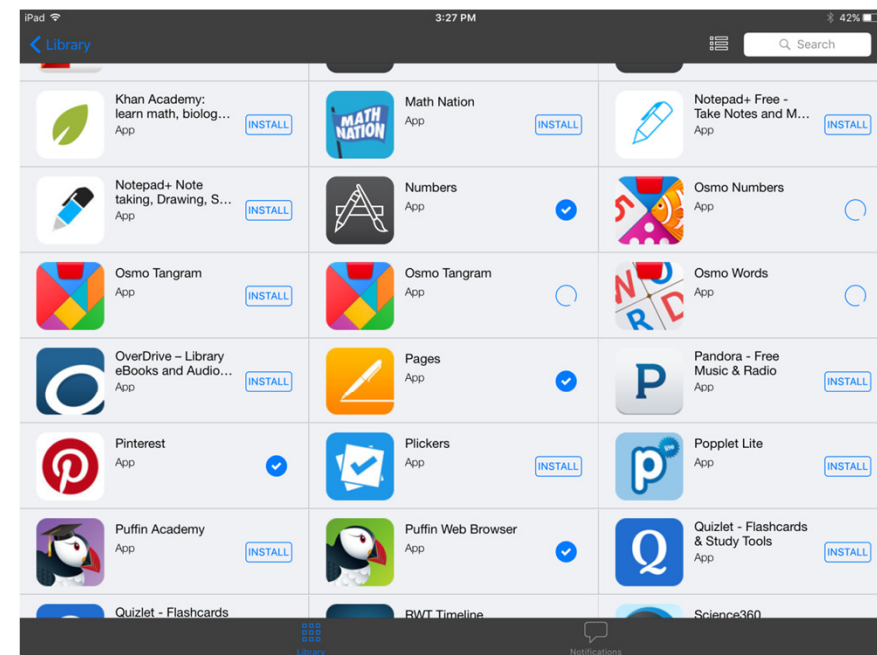
# Guided Access

- Guided Access helps you lock an app into place. This is great when setting an iPad as a dedicated AAC device.
- Parts of the screen can also be set to disable button in apps or limit the functionality of an app.
- How to and steps - <https://support.apple.com/guide/ipad/guided-access-ipada16d1374/ios>



# MDM - JAMF

- An MDM (Mobile Device Management) allows you to manage many iPads through one interface.
- They allow you to set policies, add restrictions, deploy apps, update the devices, keep them organized, and find lost or stolen iPads.
- JAMF has a feature called Self Service, which allows you to make apps available to download for your staff.
- At Monarch Center we use JAMF for our MDM solution.
- There are many different MDM's Jamf, Meraki, Maas360, AirWatch, and many more.





# SMARTBoards

- Smartboards are a great way to engage a group.
- At Monarch Center we use 25+ SmartBoards.
- Staff build lessons on the SmartBoard Notebook software or Vizzle and share them with each other.
- These lessons are customized to the IEP goals and objectives they are working on with the students.
- Smart Light Raise
- Ability to project up to a 100" display .
- Differentiates between touch and pen use.
- Has built in speakers and microphone.
- 2 to 4 touch points depending on the model.
- No actual board to damage.
- Access to Smart's over 60,000 learning resources



# Scosche Magic Mount

- Magnetic Mounts, safe for the iPad.
- At Monarch Center we have them on the back of most of the iPads.
- A metal piece with a 3M adhesive sticks to the iPad. The Magnetic part of the mounts can be placed on the walls or other surfaces.
- Great for bathrooms and even desks.



Price: \$10-\$40

# Home Technology



# Smart Speakers

- There has been a growing trend of smart speakers and devices being used in the Autism community to encourage & facilitate communication.
- From an educational standpoint the cause and effect experience – helps individuals engage and interact with these devices.



Logan Voice  
Control video

# Siri – HomePod

- Apple's voice communication AI is known as Siri.
- Siri is integrated in Mac's and all iOS devices.
- In 2018 Apple released it's HomePod speaker which allows a person to interact with Siri through a standalone speaker.



# Amazon Echo

- Amazon Echo product line consists of multiple different size speakers and some with displays.
- Amazon's voice is known as Alexa
- Amazon Echo is made to be placed around the house and it answers questions for you and acts as a personal assistant.
- Works really well with IFTTT (If this then that).
- With Amazon integration adults with autism can also use the device to order items they may need.



# Google Home

- Google Home consists of two different size devices the mini and the regular home.
- The AI behind the devices is Google Assistant.
- You can get answers, play songs, access information and make changes to your Google Accounts, and control other Google Home Smart devices..



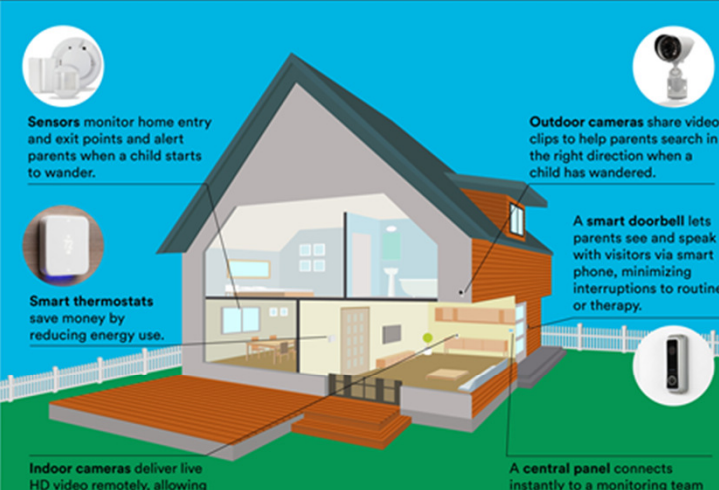


# Smart Homes for Autism

- Smart home technology has the potential to keep an individual on the Autism spectrum safer and more regulated within their home environment.
- Smart homes can provide such things as automatic door locks, door and window sensors, motion detectors, indoor cameras, doorbell camera, light controls, room to room audio and communications ability.
- Companies such as Vivint Smart Home and Control4 have been specializing in Autism friendly setups.
- <http://www.youtube.com/watch?v=6EsJw5-D2hY&t=0m48s>

## Smart Home Technology Helps Keep Children With Autism Safe And Secure

One in 68 children are now diagnosed with autism spectrum disorder. It's common for children with autism to wander – smart home technology offers their families peace of mind.



**Sensors** monitor home entry and exit points and alert parents when a child starts to wander.

**Outdoor cameras** share video clips to help parents search in the right direction when a child has wandered.

**Smart thermostats** save money by reducing energy use.

**A smart doorbell** lets parents see and speak with visitors via smart phone, minimizing interruptions to routines or therapy.

**Indoor cameras** deliver live HD video remotely, allowing parents to monitor children from a distance.

**A central panel** connects instantly to a monitoring team that can alert emergency personnel in an urgent situation.

Brought to you by:  
Vivint Smart Home  
Official Safety Sponsor  
of Autism Speaks

49% of children with autism wander from safety. 43% of their parents report losing sleep fearing their child will wander at night.

53% of children with autism wander long enough to cause significant worry.

65% of wandering incidents involve a close call with traffic.

62% of parents say worry of wandering prevents them from attending activities away from home.

Parents seek to help their children with routines and uninterrupted intervention for several hours every day.

Caring for an individual with autism can require additional financial resources.

# Smart Home Video

# Arlo Wireless Cameras

- Arlo is one of the leading developers for home camera systems.
- To start you can buy a set that has a base station and usually comes with a couple cameras. You can then add on more cameras. All of the cameras are wireless using WiFi, and can be battery powered, solar powered, or wired into power.
- They support 2 way communication
- Recording to cloud service.
- Connects with IFTTT



Price: \$150-\$500

# Smart Things Sensors

- A 2012 study found that 49% of all children with autism attempt to wander or bolt from a safe, supervised place.
- Smart things sensors allow you to place sensors on your doors, windows, and even cabinets.
- There are even motion sensors.
- It can then activate services or notify of these events.
- Works with IFTTT



Price: \$30-\$200

# Phillips Hue

- Hues are smart light bulbs.
- They can be used to change the color of a whole room.
- If prompting an individual on the spectrum sometimes it is difficult to direct their attention to the prompt.
- Hues paired with IFTTT can create schedules in which this smart device can change colors at a particular time or when an event happens.
- Example: Shower time - the light in the family room turns Blue to prompt.
- Outside Door opens at a time outside of the usual parameters – the bulbs all turn red to alert you.
- Recently they have started selling out door lighting too.



Price: \$39-\$300



# Personal Tech



# Wearables & Autism

- Wearable technology is a booming trend.
- For children with Autism they stand heavily benefit from this technology, as it can help them adapt to their everyday life.
- From a research structure wearables allow us to track and gain more information about the relationship between environmental factors and the student's reaction to them.





# Google Glass

- Google Glass is a technology that Google developed about 5 years ago.
- They are a set of glasses outfitted with sensors, microphones, cameras, and a tiny display only visible to the wearer.
- The technology although very promising developed a stigmatism due to its ability for the user to record someone without them knowing. At this point Google has seized development of the tech. However other third parties are still developing for it.
- In a pilot trial, described online August 2 2018 in *npj Digital Medicine*, 14 children with autism spectrum disorder used this program at home for an average of just over 10 weeks. After treatment, the kids showed improved social skills, including increased eye contact and ability to decode facial expressions.



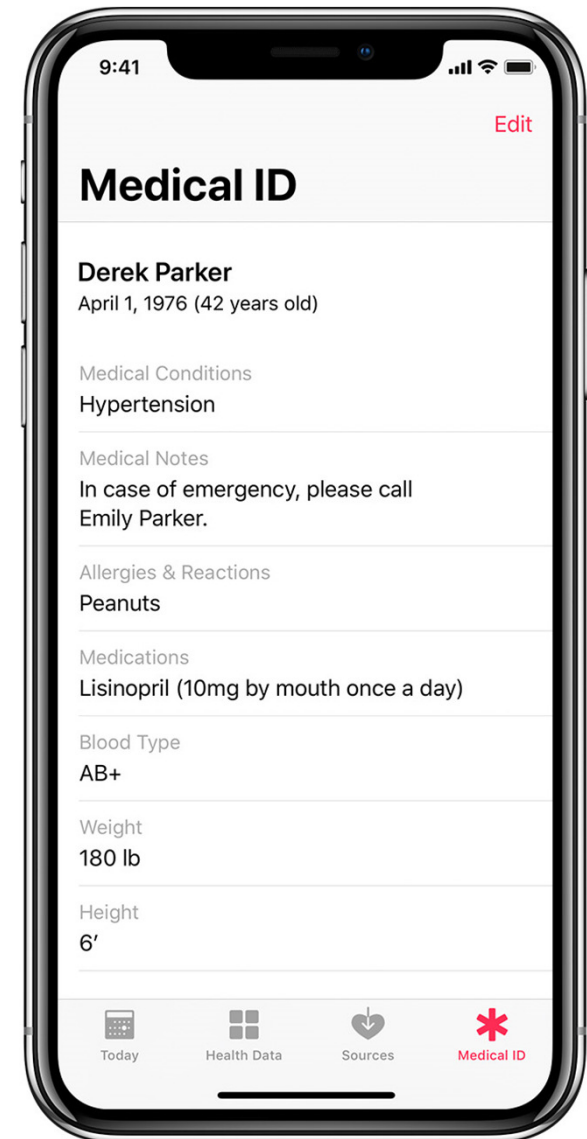
# Apple Watch – Autism

- Apple Watch does require an iPhone to be paired with the device during setup.
- Once paired notifications and prompts from the iPhone can appear on the Apple Watch.
- Using features such as Messages you could prompt a student in a more socially appropriate way. Reminders can be used to help prompt a student or create a schedule.
- In Apple Watch Series 4 there is now fall detection - it will call 911 if a fall is detected. (Off by default)
- In series 4 watch they also added a built in ECG which can help detect heart issues.



# iOS Medical ID & SOS

- Recent versions of iOS have added a Medical ID card.
- This can be used in emergency situations and first responders can activate a device to find out vital medical information about a patient to help treat them.
- In the advent of an emergency and SOS has been activated you can also set an Emergency Contact. They will be alerted to the emergency and will have the ability to track where you are at.
- About Medical ID - <https://support.apple.com/en-us/HT207021>
- Emergency SOS – <https://support.apple.com/en-us/HT208076>

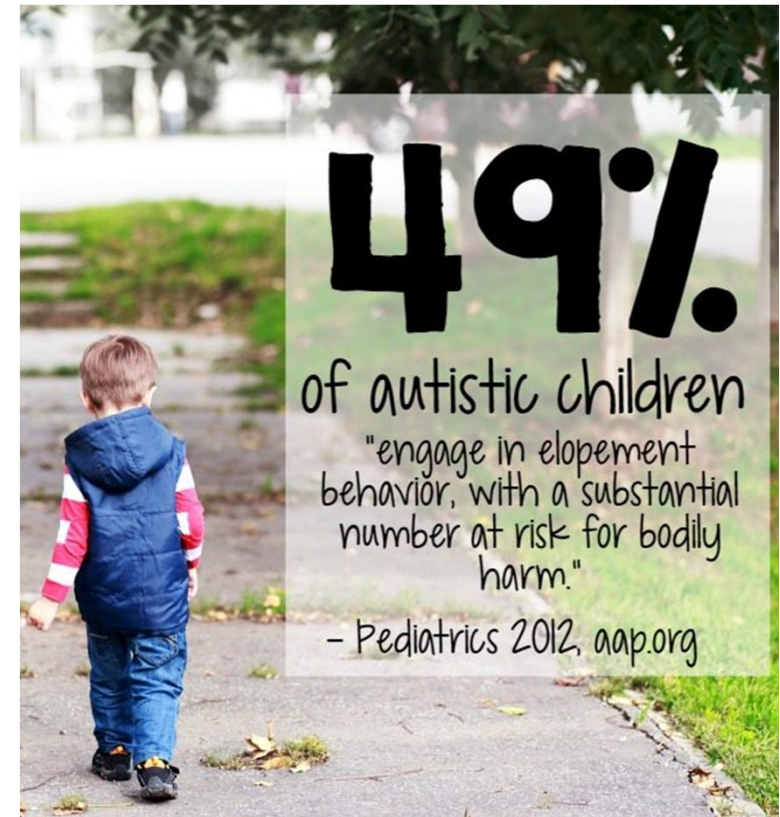




# Elopement and Tracking Tech

# Elopement and Tracking Tech

- Last week as I was doing research for this presentation I found 4 separate news articles where individuals with autism eloped.
- The ability to track someone who has a propensity to elope, can offer a great piece of mind.
- When looking at these devices look for a device that have cellular/gps access built in – this will allow you to track the device where ever there is a cellular signal.
- Devices that have Bluetooth tracking are very limited to 50-100 feet.



# SafeTracks GPS

- Safetracks™ is a tracking solution marketed towards those with: with Alzheimer's/Dementia, Autism, and those suffering from PTSD.
- Watch Version is Called TriLoc
- Features:
- SOS button
- Fall detection
- Up to 1-minute location updates
- PING for updated location
- 2G/3G/4G connection variable reporting parameters
- 2-way
- Hands-free voice
- Splash resistant
- SafeTracks TrackNow™ Mobile App iOS & Android
- Electronic Geo-Fence zones
- Email and SMS notification
- Rechargeable battery pack
- Also make a shoe insert version called GPS SmartSole™.



\$299 - \$399

# Amber Alert GPS

- Multiple versions for different wearability - GPS sleeve (Clip on), Belt, and shirt.
- Does Require a subscription 2 tiers
- The Standard Monthly Service Plan supports unlimited text & email notifications and 30 voice minutes per month. Keep busy families connected with location information and voice functionality throughout the day.
- The Premium Monthly Service Plan includes all the Standard features plus our Safety Monitoring Center with agents available 24/7 to dispatch law enforcement or emergency medical assistance anywhere in the United States. If you need help, or simply want to speak with an agent because you feel unsafe, press the one-touch SOS call button to connect with a trained safety agent who can access your real-time location information and dispatch emergency help in seconds.
- <https://amberalertgps.com/>



**\$135**

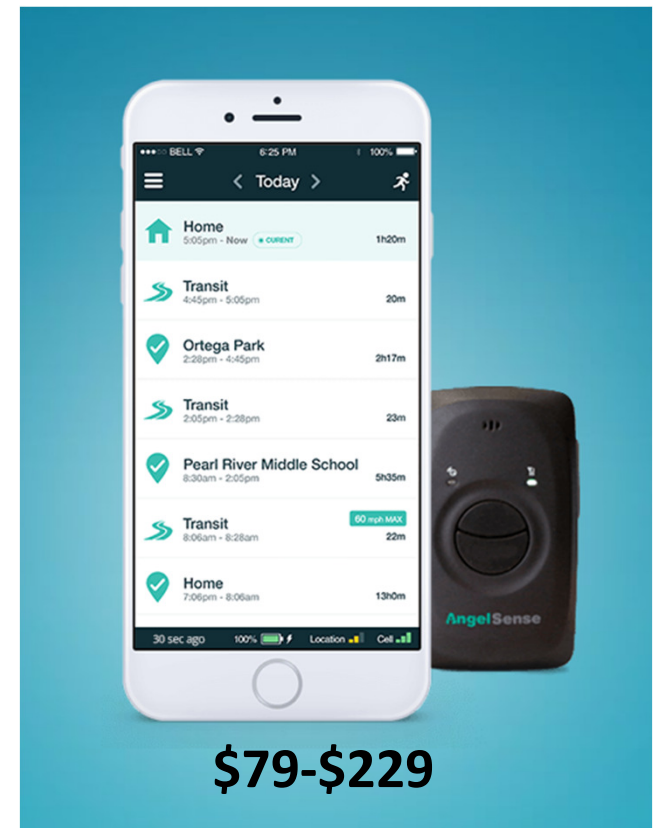
**Subscription Service  
Required**

**\$15 (Regular)**

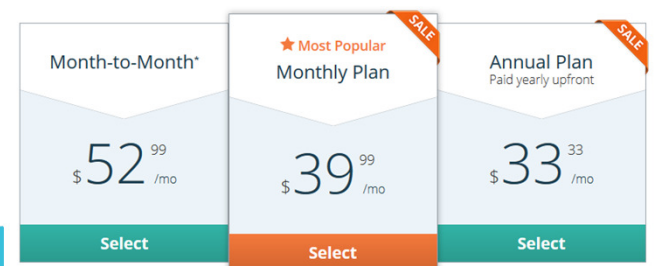
**\$25 (Premium)**

# Angel Sense

- Multiple versions for different wearability - GPS sleeve (Clip on), Belt, and shirt.
- Does require a subscription – federal funding.
- **Runner mode** - Share your child's real time location with your trusted first responders, family, friends, teachers & neighbors to bring your child home safe.
- **Late Departure Warning** - Get alerted immediately if your child isn't on his bus or carpool.
- **1-Way Voice** - Hear who your child is with. Make sure your child is well and is being treated kindly.
- **2-Way Voice** - Speak to your child anytime. Requires no action on your child's part. Keep your child calm & guide them through transitions, or unexpected changes in routine. Option to add loved ones to call as well.
- **Sensory friendly design** - Unlike watches, AngelSense has multiple wearing options, & accessories are designed for sensory sensitivity. Tamper proof design ensures your child cannot remove or destroy the device.
- <https://www.angelsense.com/autism-tracker/>
- Funding through Insurance: <https://www.angelsense.com/autism-gps-funding-options/>



## CHOOSE YOUR PLAN





# Verizon GizmoWatch

- Was previously LG's Gizmo Gadget watch
- A smart watch that does not require a separate phone to have it paired to them.
- Activation on Verizon plan for \$5 a month.
- Track wear your child is located using an app on your phone.
- Set Geo Fence boundaries if wearer goes outside of the boundaries you will be notified.
- Can also give caregivers access to device as well.
- Water resistant not waterproof



\$179

# Bluebee Pals

- Plushes that pair with an iPad via bluetooth.
- Comes in 6 Personalities / plush types.
- Moves its mouth as it sings and reads them stories. After can ask them comprehension questions.
- Rechargeable.
- Can read any text allowed that the iPad will play. Will read the output from an AAC app. You can use the onboard iPad Accessibility feature to read the text that is on the screen and type out the language.



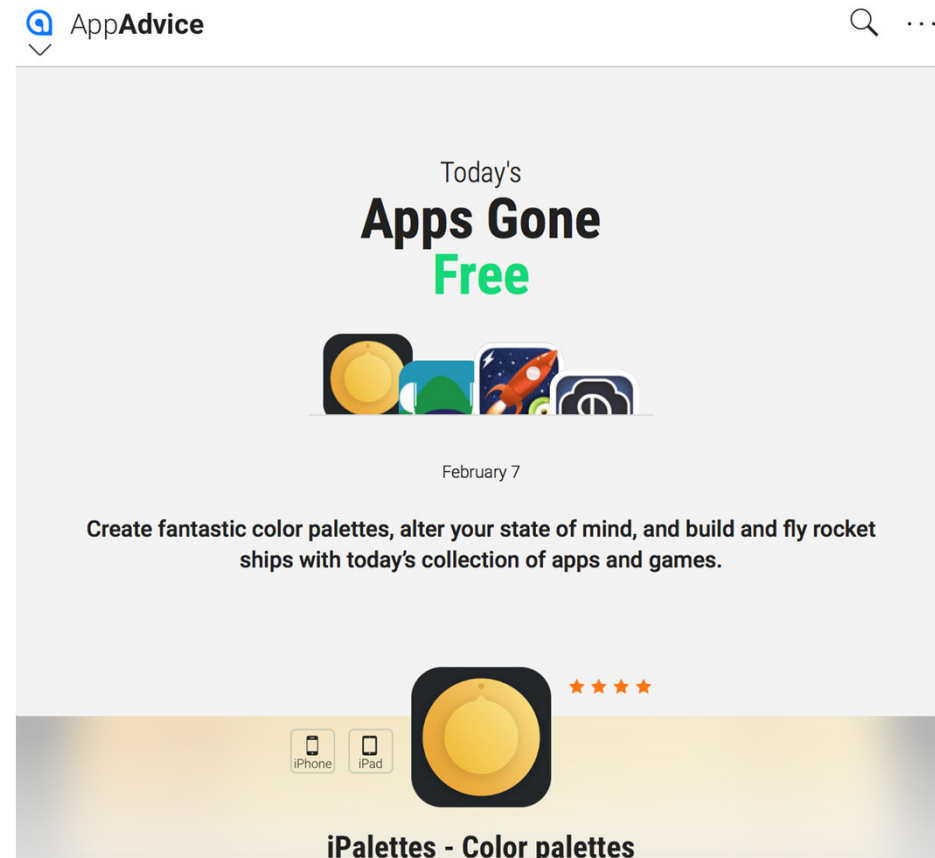
\$66-\$75

WEBSITES



# App Advice

- <https://appadvice.com/apps-gone-free>
- App Advice allows you to see trending apps with tops apps of the day, week, month, year.
- In their 'Apps Gone Free' section they have a daily updated website that lists all apps that have changed their status to free today.
- April is National Autism Month, and this is a great way to find apps on sale during that month.
- If you manage an MDM most sale prices as well as Free apps are honored through Apple's Volume Purchase Program.
- Example in August Proloquo went on sale, regularly \$249 for 50% off. That is a cost of \$124.50, under Apple's Volume purchase program when you buy 20 or more licenses your cost is 50% off or \$62.25.





# iOSnoops

- <https://www.iosnoops.com>
- iOSnoops.com is a free open to the public website that shows daily iOS apps that have gone on sale or are free temporarily.
- You can also look up a specific app such as Proloquo2Go and see it's pricing trends.
- You can subscribe to notifications when apps go on sale or pricing changes.
- The notifications are good for 30 days after which you get an email to resubscribe.
- Top app charts to see what pos are tending.

The screenshot displays the iOSnoops website interface. At the top, there is a navigation bar with the site logo and a promotional banner for a Dell laptop with a 10% discount. Below the navigation bar, there are three main sections: 'App Price Drops' (22 Apps Today), 'Apps Gone Free' (9 Apps Today), and 'New Apps' (11 Apps Today). Each section features a grid of app icons and a 'View Deals' button.

GET AN EXTRA 10% OFF  
Click for legal.  
[View Deals](#)

**App Price Drops**  
Wednesday, February 7, 2018  
22 Apps Today

**Apps Gone Free**  
Wednesday, February 7, 2018  
9 Apps Today

**New Apps**  
Wednesday, February 7, 2018  
11 Apps Today



# IFTTT

- <http://www.ifttt.com>
- If This Then That is a free website that allows you to create conditional statements (trigger) the cause an interaction with a service (action).
- A completed set is called a recipe.
- A simple example of this would be when snow is in the forecast send me an email with the weather for tomorrow.
- A complex version can be set using other devices like when I come home turn on all the lights and play some music.
- For anyone using Amazon Echo's this is an awesome pairing.
- Can be used for kids on the spectrum to teach rudimentary programming skills, and cause and effect.



Recipe

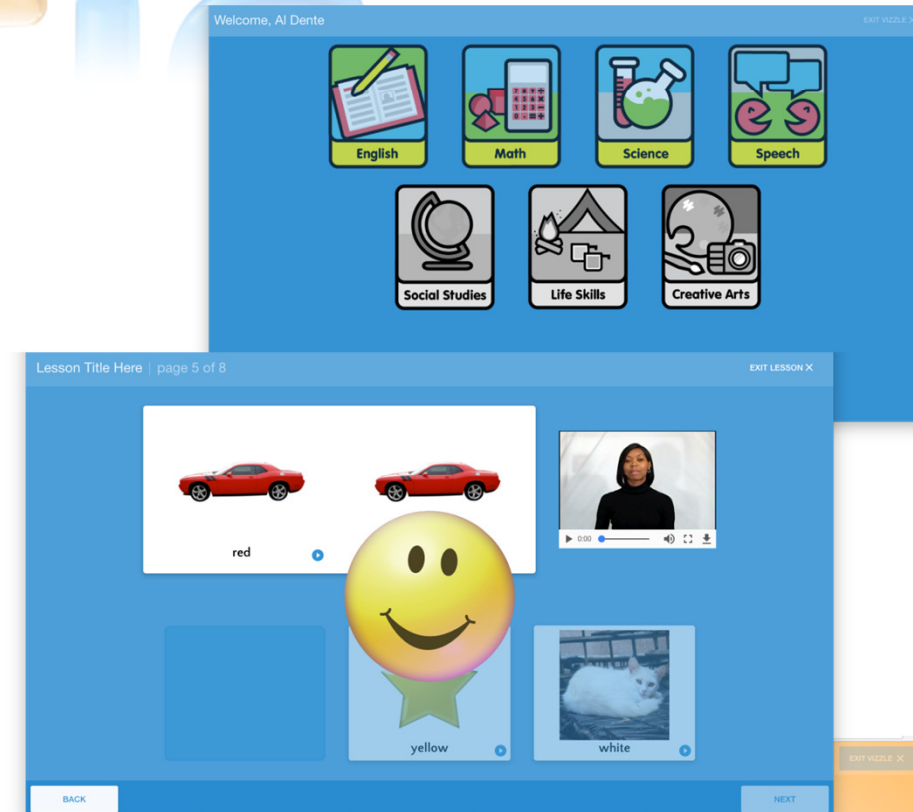
**if this then that**

Trigger

Action

# vizzle

- VizZle is an online subscription based software for teaching children with Autism.
- VizZle has multiple tools for teaching included through stories, games, matching exercises, sequencing, sorting and the ability to create visuals and schedules.
- VizZle has a lesson library of over 13,500 activities created and shared by teachers and therapists.
- It automatically collects data on a student's progress to log against IEP goals and objectives.
- Using the VizZle Player app versions of which play on computers and many mobile devices.
- A new version of VizZle completely rewritten from the ground up is coming out at the end of march.



# Recommended Apps



# Apps Important Notes

- The original iOS app store launched in 2008 with 800 apps.
  - iOS currently has around 1.8 Mil. Apps.
  - The Google Play Store has about 2.1 Mil.
- After 11 years both app stores have developed some fragmentation of apps that are no longer available and some apps that have not been updated in years.
- When looking at Apps first look to see what version of the OS your device is running.
  - On iOS go to Settings - General – About
  - Knowing what OS version your device is running can help you search for apps.

# iOS 11 and Apps

- When reviewing an app google search it, or look in the app store on the device you are looking to run the app on. Look for the section of the app called “What’s New” or “Version History.” From here you can see when the app was last updated.
- If you cannot find an app in the app store that you find on the web it may have been removed.
- Also Check Reviews for comments left by purchasers to see if an app does what it says it will do.

## What's New

[Version History](#)

This version introduces bug fixes. Thanks for using our app!

Version 6.1.1

## Version History

6.1.1

Apr 24, 2019

This version introduces bug fixes. Thanks for using our app!

6.1

Jan 7, 2019

Version 6.1 introduces compatibility for iPad Pro 11", iPad Pro 12.9" (3rd generation), iPhone XS, iPhone XS Max and iPhone XR. This version also includes the new features recently introduced in version 6:

- New volume options like a shout function

[more](#)

6.0.1

Sep 14, 2018

This update makes Proloquo2Go even more versatile and easy to use through new audio, customization and sharing options.

Audio

[more](#)



# Book Creator for iPad

By :Red Jumper Limited

- Allows you to create your own books including social stories.
- Very customizable with your own text and pictures. You can add video and music, and even record your voice.
- Use the pen tool to draw and annotate your book
- Choose from portrait, landscape or square book sizes
- Many ways to export: A quick tap and you're reading your book in iBooks.
- You can even publish your book online (teachers only)
- Send your book by email, AirDrop to iPhone, iPad or MacBook
- Save your book as a movie file and upload to the web



Price: \$4.99

# Epic

- Over 15,000 great titles with many more added weekly
- Audiobooks and “read-to-me” books
- Individual customized child profiles at no additional cost
- Personalized book recommendations for each child
- Online and offline reading (take Epic! in the car, on a plane, or camping)
- A detailed reading log to track reading progress available in the app, and emailed weekly to parents
- Free for Librarians and Early childhood teachers.



Price: \$4.99 /mo  
+ Universal



# Story Creator - Easy Story Book Maker for Kids

- Made by : Innovative Mobile Apps
- Allows you to create simple social stories
- Record your own voice and select your own images.
- Will read each page as it progresses.
- Very easy to edit.
- You can share books you create with others via Download Link via email.
- Can share publicly and people can rate and review books
- Can also back up your books to iCloud.
- I use this app with My son for his social stories.



Price: Free  
+ Universal



# Attainment's Computers at Work

- Made by : Attainment Company
- A free version is available.
- Computer's at Work Teaches basic data entry techniques and skills.
- Includes Order Processing and Data Entry which challenge students to work independently for an hour or more.
- As skills improve, users progress from simple tasks to jobs common in today's workplace entering orders, checking inventories, and determining payment methods etc.



Price: Free - \$69.00  
+ Universal

# Handwriting Without Tears: Wet-Dry-Try for Capitals, Numbers & Lowercase

- Made by : Handwriting Without Tears & Get Set for School
- Teaches handwriting skills
- Can practice letters in any order they choose, or follow the HWT Order, which presents the letters in the proven Handwriting Without Tears® developmental teaching order.
- Audio Cues
- Each letter has three levels of difficulty that build skills progressively.
- The two options for sensitivity allow parents and educators to adjust the writing tolerance depending on each student's needs.
- Lefty-friendly setting lets you adapt horizontal cross-strokes to make their handwriting easier.



Price: \$4.99  
+ Universal





# Little Writer Tracing App: Trace Letters & Numbers

- By Innovative Mobile Apps
- Fun app for OT's teaching children to write by tracing over interactive ABC uppercase letters, abc lowercase letters, Numbers 1 to 100 (only 1 to 20 are turned ON by default), 20 basic shapes including lines, circles, rectangles and more, Dozens of 3 and 4 letter words to make practice more enjoyable and interesting
- Ability to add an unlimited number of your own words and pictures for maximum enjoyment and variety
- Trace all setting - when "Trace all" is turned on, users need to trace all letters on one page which makes it more like writing words
- Works great with Apple Pencil.



Price: \$1.99

+Universal

# AACORN AAC

- By aacorn
- Instead of hunting and pecking for single words, your child/student makes a word choice and branching pathways with smart suggestions for the next word in a sentence present themselves automatically.
- Real recorded Children's Voices (English, US, UK, Aus)
- Synthetic Text to Speech Voices (adjustable speed and pitch)
- Built-In Interactive Lessons
- CORE Vocabulary
- Powerful Word Creation and Editing Tools built-in
- Customize Categories and Sub-Categories
- Take/Import Photos via iPad Camera



Price: \$69.99  
+ Universal

# The Social Express II

- Made by : The Language Express, Inc
- In this app you will help the characters solve social problems.
- Each of the 81 episodes helps target one of many skills children and young adults need to learn in order to develop meaningful relationships and successfully navigate our social world.
- Progress Reports
- Grade Leveled Quizzes (Aligned w/C.C.S. ELA)
- Flexible Teaching Plans
- Pre and Post-Assessments



Price: App free  
Subscription

1 Month = \$14.99

1 Year = \$69.99

# Explore Daniel Tiger's Neighborhood

- A scene cue application to facilitate communication.
- 5 areas located in Daniel Tiger's Neighborhood. The Grocery Store, Music Shop, Bakery, Doctor's Office, & Enchanted Garden
- Areas to teach about using the potty.
- Able to explore those areas with interactive components and mini games such as the ringing people out at the grocery store.
- You can place characters in any of the exploration areas as well.



Price: \$2.99  
iPad & iPhone



# Toca Store

- By :Toca Boca AB
- Turn your iPhone or iPad into a Store Play set.
- Teaches turn taking, cooperation, negotiation, basic mathematical skills, & resource management
- Choose between 34 different objects to sell in your store
- Set your own prices



Price: \$3.99



# Autism Tracker Pro

By : **Track & Share Apps, LLC**

- This is a behavior management and tracking tool. You can track many facets including:
- Facets of mood, behavior, food intake, and health.
- REPORTS
  - Customizable visual scales
  - Use your own images and labels
  - Powerful analytical package
  - Daily, weekly, monthly graphs
  - Export lists of entries for detailed review
  - Export tables for daily, weekly, or monthly graphs
  - Export backups for safe keeping or sharing



Price: \$9.99

# The Zones of Regulation

- Made by : Selosoft, Inc.
- “The Zones of Regulation ([www.zonesofregulation.com](http://www.zonesofregulation.com)) is a framework for thinking as well as a curriculum geared toward helping students gain skills in consciously regulating their behaviors, including the management of their emotions and level of alertness. This, in turn, leads to increased self-control and problem solving abilities. “
- Helps Teach Student’s a color coding system of feelings and behaviors, and then teaches them tools to regulate themselves in those scenarios.



Price: \$5.99  
+ Universal



# Children's Countdown Timer

- Made by : Fehners Software LLP
- This is Monarch's goto Timer app and it is on all of our iPads.
- Designed by a parent for their 2 year old.
- Can use a color timer that changes from green to amber red.
- You can choose any image to reveal, very customizable.
- Fun animations when timer completes.
- Can turn off sounds and a child mode to hide the buttons.
- Background image changes to match the time of day.



Price: Free  
+ Universal

# My DPS

- Made by : The Language Express, Inc
- My DPS is a customizable application that enables children to select a feeling and a coping strategy to calm themselves. My DPS features eight feelings including:
  - Bored, Surprised, Mad, Annoyed, Happy, Scared, Sad, & Frustrated
- There are four coping strategies which include:
  - Use Positive Self-Talk, Take Five Deep Breaths, Take a Break to Calm Down, Remind Myself to Keep Negative Thoughts In My Head
- When a child selects a coping strategy, they will then see an animated video which models how to do the strategy.
- Customize your DPS by adding your own feelings and coping strategies. This can be done by taking a picture or by importing from the camera roll.



Price: Free  
+ Universal

# Volume Sanity

- Using the built in iOS settings you can only limit the output volume in the music app using headphones
- Volume Sanity will reduce the volume of all apps to a desired percentage.
- You can password protect the volume limit.
- Some important limitations to note are:
- The App must stay open in the background to work
- When your device goes into low power or dies, you may have to 'wake up' the app



Price: \$3.99  
+ Universal





# Voice-O-Meter

- Made by : Use Your Noodle, LLC
- App to assist those who speak to quietly or too loudly, helps regulate tone.
- You can set the decibel of what is too quiet or too loud.
- Warning Chime will be heard when the threshold is met.
- Chime does not go off when too low.
- Data can be tracked in the app.



Price: \$.99

+ Universal

# Autism Therapy with MITA

- By **ImagiRation LLC**
- Matching and Puzzle App.
- MITA aims to train mental integration and receptive language, starting with simple vocabulary, and progressing towards higher forms of language, such as adjectives, verbs, pronouns, and syntax.
- Based on ABA techniques of visual-visual and auditory-visual conditional discrimination.
- Based on language therapy technique of following directions with increasing complexity.
- Based on Pivotal Response Treatment that targets development of response to multiple cues.
- Each activity is adaptive and delivers exercises that are at the exact level of difficulty appropriate for your child at any given point in time
- Playtime rewards will keep your child engaged while learning and having fun
- No Wi-Fi necessary



**Price: Free**  
& In app purchases

# Endless Reader

- By Originator Inc.
- Teaches sight words with the assistance of fun little monsters.
- Features:
- 6 words free to try with additional word packs available for purchase.
- Delightful animations reinforce sight recognition of words in a fun and interactive way.
- Word puzzles reinforce spelling using lower-case letters and the sentence puzzles teach definition and usage (in addition to sight recognition).
- Endless Reader was designed with your children in mind. There are no high scores, failures, limits or stress. Your children can interact with the app at their own pace.



Price: Free -  
in-App purchases  
+Universal

# Endless Numbers

- By Originator Inc.
- Features:
- Helps facilitate early number recognition.
- 5 numbers are free
- Animations reinforce number recognition, quantity, and counting.
- Interactive number puzzles reinforce basic numeracy skills.
- No timers or limits



Price: Free -  
in-App purchases  
+Universal

# TouchMath Counting Basic

- Made by : MediaKube, LLC
- TouchMath Counting Basic teaches single digit number values using the TouchMath methodology
- As students count the TouchPoints, they associate numerals with real values.
- The basic version instructs students on:
  - Numbers 0–9
  - Number Values
  - Touching/Counting Patterns
  - Placing TouchPoints
  - Numeral/Quantity Association
- There is an upgraded version with more features for \$1.99



Price: Free  
+ Universal



# YouTube Kids

- YouTube Kids allows an individual access to YouTube but to curated videos.
- The app allows you to set the age of the individual and only show videos for that specific age range.
- The or Voice to search feature.
- Parental section Controls :
  - set a timer to limit time use of app.
  - Turn off App sound affects and music, great for individuals with Autism.
  - Play HD on Wi-Fi only so it doesn't consume your data.
  - View history.
  - Setting YouTube account and using YouTube Red can download videos for offline viewing



Price: Free  
+ Universal



# SnapType

- Made by : SnapType
- With SnapType, students can take a picture of their worksheets, or import worksheets from anywhere on their device. They can then use their iOS device keyboard to add text to these documents and print, email, or share their creations.
- Can import PDFs
- Can save multiple documents
- Pro version with expanded functionality



Price: Free

+ Universal

# Teaching Coding

# Swift Playgrounds

- Made by : Apple
- Teaches anyone how to code using the Swift Language, the currently language iOS apps are programmed in.
- No previous coding or other knowledge required.
- The app starts off very simple of moving a character through a world using coding commands.
- As you progress in levels the coding builds on itself and the knowledge gained can be used to create real apps.



Price: App free

# Daisy the Dinosaur

- Made by : Hopscotch Technologies
- This free, fun app has an easy drag & drop interface that kids of all ages can use to animate Daisy and make her dance on their screen. Kids will intuitively grasp the basics of objects, sequencing, loops and events by solving this app's challenges.



Price: App free



# Tickle School Edition

- Made by : Tickle Labs, Inc.
- Cause and effect is one of the cornerstones to teaching individuals with ASD.
- This app allows you to program real world objects.
- A drag & drop programming interface for Drones, the Star Wars BB-8 Droid, Sphero (SPRK) robotic ball, Ollie 2-wheeled robot, Parrot Rolling Spider, Airborne, and Jumping Sumo mini drones, Arduino LightBlue Bean, Philips Hue smart home lighting system.
- You can also program interactive stories and games using our library of animated characters and sounds.



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Price: \$19.99



# Emerging Technologies



# Virtual Reality

- Virtual Reality is defined as “the computer-generated simulation of a three-dimensional image or environment that can be interacted with in a seemingly real or physical way by a person using special electronic equipment, such as a helmet with a screen inside or gloves fitted with sensors.”
- This technology is proliferating over the last few years due to a growth in processing power that allows for rendering of real life images and high definition environments.



# VR - Safety

- At the University of Haifa, Israel they have created VR simulations that features a number of scenarios which are all designed to teach autistic children how to cross a road. The simulation shows a street with traffic lights and cars which the child interacts with. The child learns to cross a road safely and without placing them in danger or causing undue stress. These skills are then practiced in a real world but controlled area.



# Vita DMF

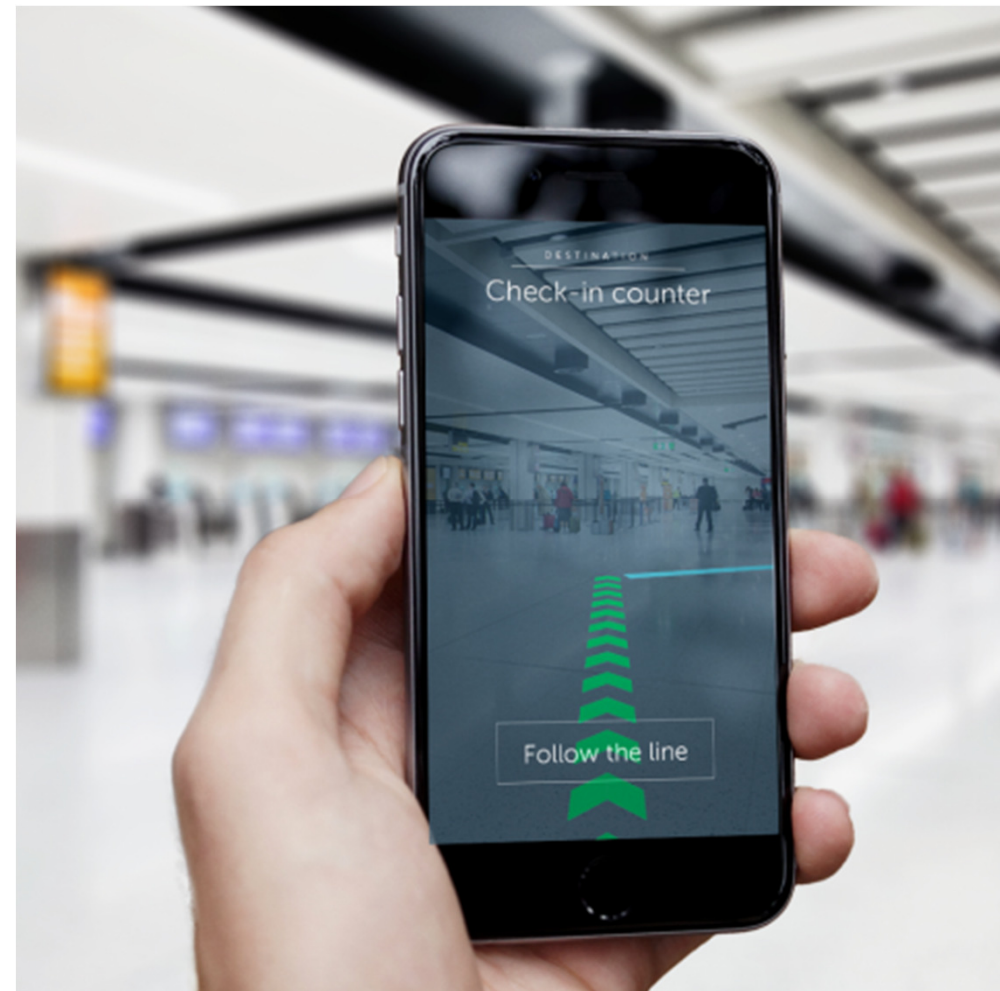
- The USC Institute for Creative Technologies and Dan Marino Foundation have partnered on technology to improve social skills. The fruits of their labor is Vita DMF.
- This Virtual reality experience creates real world job interviews for individuals with ASD.
- These lessons can help an individual prepare for the work force and gain their confidence as they prepare for the interview process.





# Augmented Reality

- Augmented reality is defined as “technology that superimposes a computer-generated image on a user's view of the real world, thus providing a composite view.”
- For the everyday person think of this technology as an overlay to the world around you, that you can interact with.
- For Individuals with ASD this technology could help ease their interaction with the environment and provide them important contextual information.
- The boon to this technology is that it is manipulating the real world.



# Monarch Center for Autism

*A Division of* Bellefaire JCB



## Services

- Preschool & Day School
- Transitional Education Program
- Boarding Academy
- Adult Autism Program & Residence
- Extended School Year
- Summer Social Language Program
- Family Training, Support & Social Activities
- On-Site Consultation & Therapy
- Online Resource Center



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# Questions ?

