Current and Emerging Technology
for Individuals with Autism

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Monarch Center for Autism

Monarch Center for Autism
A Division of Bellefaire JCB

Who am I?

- Monarch Center's Educational Technology Specialist.

- I have worked for Monarch Center for Autism for 11 years. In the classroom and in my present role.

- I also worked for Monarch Teaching Technologies and helped design elements of VizZle.

- My chief responsibilities are the data system and introducing new technology into the classrooms.

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Christian Karter MA

I am also a parent

- Our son Logan was diagnosed with Autism at the age of 22 Months. He is now 3 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 all of his trains.

Augmentative Communication

- AAC comes in 2 forms unaided, sign language, and aided = devices.

- Both can be used in conjunction with each other.

- With AAC devices symbols are heavily used.

- Children with Autism are found to have strong visual processing skills, and low expressive communication. This makes them good candidates for AAC devices.

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.

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.

Apple iPad

- At Monarch Center we use approximately 150 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.

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.
- At Monarch Center we use JAMF for our MDM solution.
- There are many different MDM's Jamf, Meraki, Maas360, AirWatch, and many more.
- Selecting one is about finding the compromise between features and cost.
- For schools I have Found JAMF to be the best all around solution.
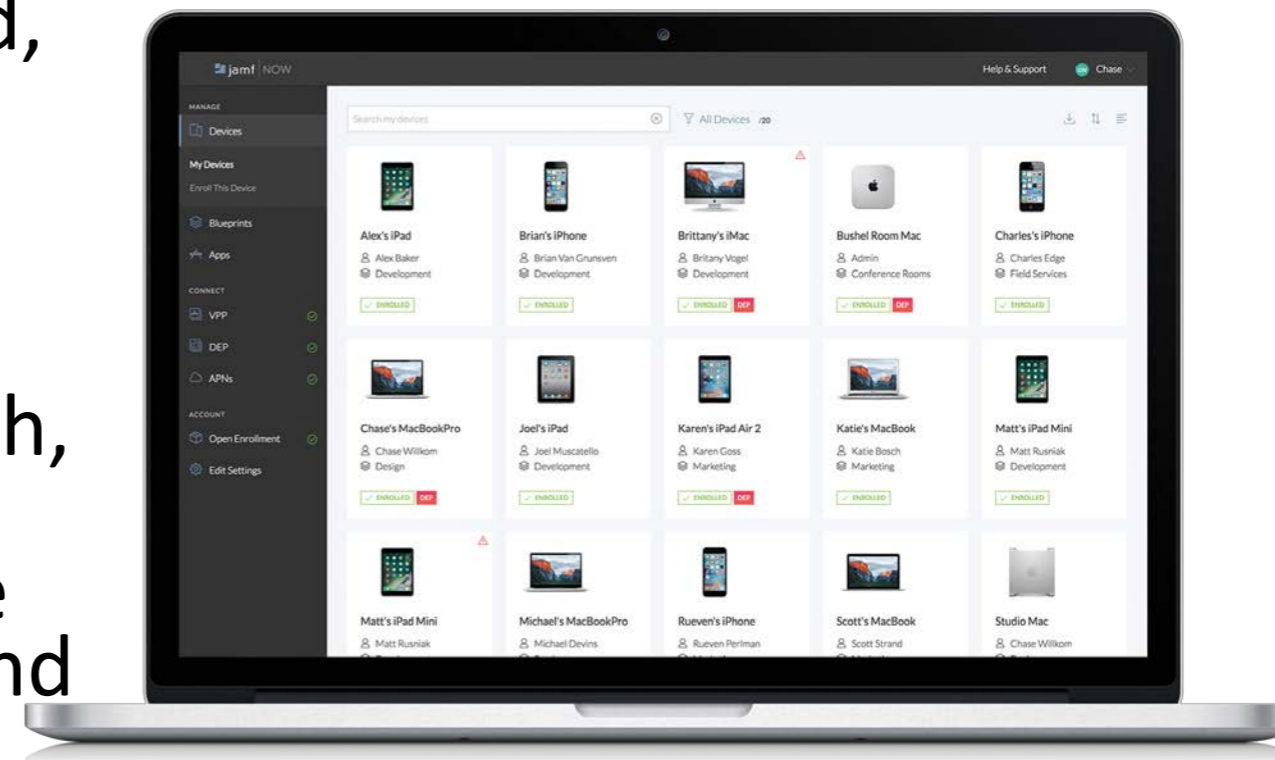
MoKo iPad Mini 4 Case

- 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

Price: $13.95

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

AppleTV 4th Gen, Amazon Firestick, & Fire TV

- Can plug into a TV or projector.
- AppleTV: Using AirPlay technology you can mirror your iPad, iPhone, or Mac screen on your TV or through a Projector.
- Firestick: Using wireless display feature on android can mirror.
- Great for teaching and presentations.
- App stores available for both to download Apps to the device to interact with using the remote. Health fitness apps, games, entertainment, news.

$149

$39.99

$89.99

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.
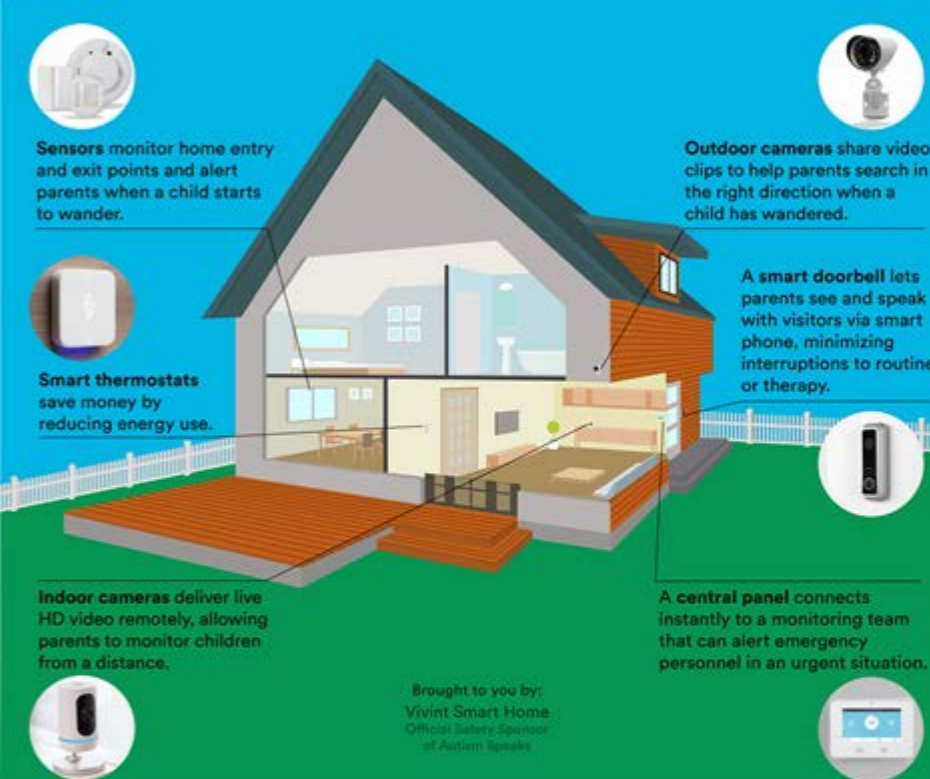- Great for bathrooms and even desks.

Price: $10-$40

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 begone specializing in Autism friendly setups.

- http://www.youtube.com/watch?v=6Es Jw5-D2hY&t=0m48s

Smart Home
Video

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

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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.
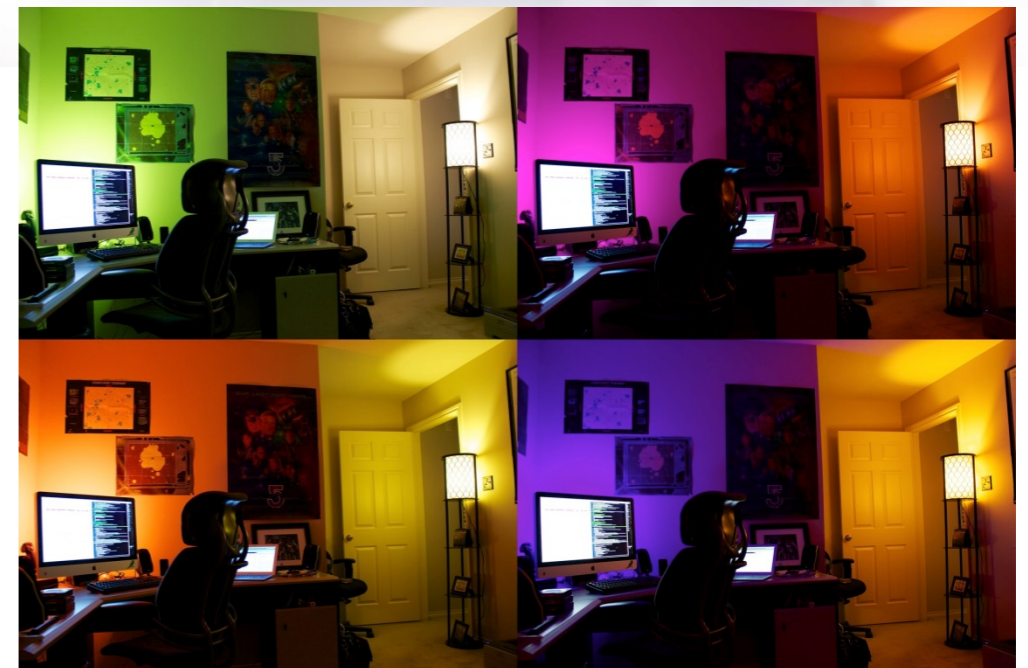
Price: $39-$300

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.

Apple Watch – Autism

- The watch has the ability to connect with your iPhone and share data from apps.
- Native Apps can now run on the watch independent of phone.
- On the new Apple Watch Series 3 - the device can run independently without it's paired phone.
- Using features such as Messages you could prompt a student in a more socially appropriate way.
- Monarch is currently in a testing phase using Apple Watches in the classroom.
- There is the potential for multiple prompt types physical (through vibration), visual (through images or messages), verbal /audio (from built in speakers)
- The Apple Watch has built in sensors to monitor things such as heart rate. These sensors could allow for additional data to be tracked on a Student with ASD.

Apple Watch Demonstration

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Apple Watch Demonstration

Apple Watch Demonstration

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

LG GizmoPal 2 & Gizmo Gadget

- Smart watches that do not require a separate phone to have them 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.
- Supports up to 4 contacts for calling
- Can also give caregivers access to device as well, GizmoPal up to

$79 $149

Bluebee Pals

- Plushes that pair with an iPad via bluetooth.
- Comes in 6 Personalities / plush types.
- Moves it 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

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Bluebee
Video

SOFTWARE
&
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
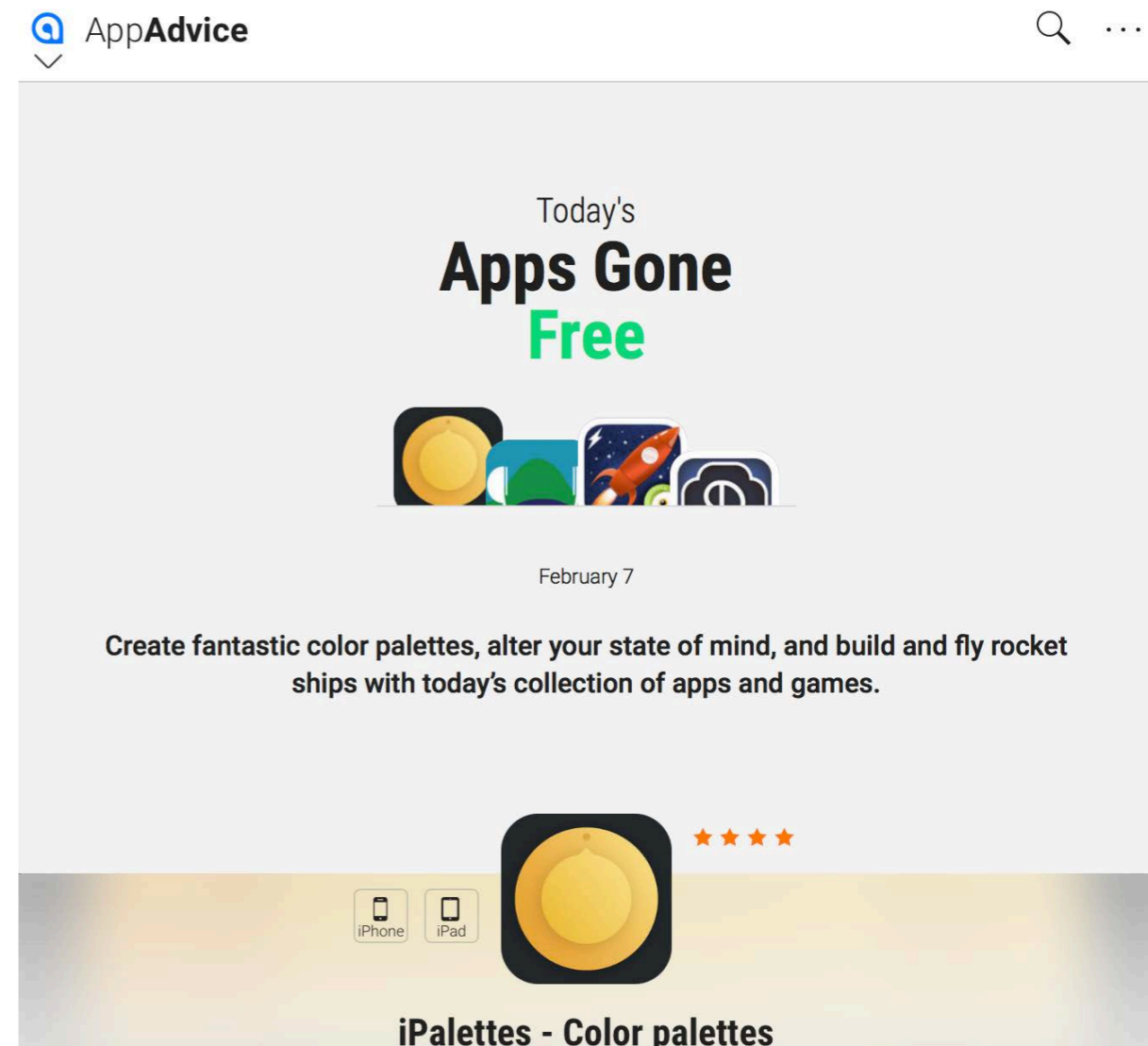
- https://www.iosnoops.com
- iOSnoops.com is a free open to the public website that shows daily iOS apps that have gone on sale or are free temporarily.
- You can also look up a specific app such as Proloquo2Go and see it's pricing trends.
- You can subscribe to notifications when apps go on sale or 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.

OT's with Apps

- https://otswithapps.com
- Blog website that reviews OT related apps but also covers special needs apps and other technology.
- Covers emerging technologies as well as common technologies.
- Has a list of a Mobile tool kit of apps for OTs.

OT's with Apps & Technology

OT's with Apps Blog   OT's with Apps mTool Kit 11-1-2014   OT's with Apps Equipment List   About Me

Lynda

- An amazing online resource for training on almost any software and hardware.
- This is a great website from the instructor who wants to learn about excel all the way through advanced video editing and even programming.
- $25-$37.50 a month
- If you live in Cuyahoga County and you have a library card it is free through the Cuyahoga county library.
- https://www.cuyahogalibrary.org/Research/Resources/Lynda-com.aspx

lynda.com

Online Training Library

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.

IFTTT

Recipe

if this then that

Trigger   Action

Boardmaker & Online

- Boardmaker is software made by Tobii Dynavox Company, formerly Mayer Johnson - which allows users to create visuals.

- Huge library of visuals, hand-drawn images, and ability to add your own images.

- Con: Boardmaker is expensive $399, it requires the CD to be in the computer on each use.

- If your CD breaks you have to pay to get a new one.

- Create activities online and print them or assign to your students.

- Student Center iPad app available in the app store.

- Track the results of student work against IEP goals or educational standards. Track staff and student usage.

- Board Maker Community to share you creations.

- $99 / year or $9.99 / month

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.
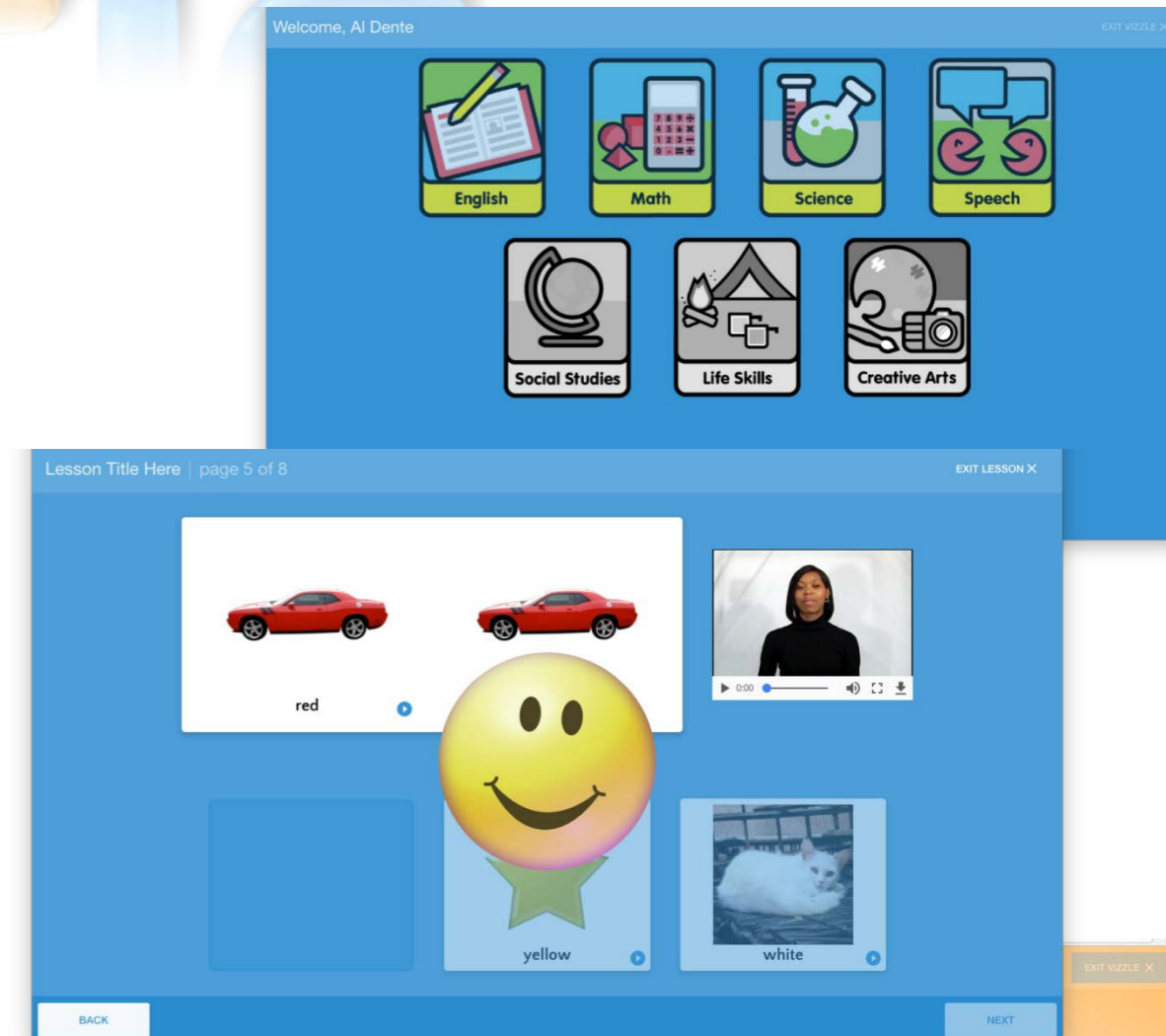
Recommended Apps

iOS 11 and Apps

- This past fall Apple released iOS 11. In this version of the OS it no longer supported 32-bit apps.

- 32 bit apps were older apps, many written when the first iPhones and iPads came out and then no longer updated.

- The lack of updates over the years rendered many apps useless.

- Many apps on previous Autism lists are no longer functional.

Visual Planner

- By Good Karma Applications
- Able to create daily, weekly, and monthly schedules.
- Able to set items with multiple occurrences.
- Ability to create "Activity Schedules", these work like micro schedules. Checklists are built into the Activity Schedules.
- Can use videos in schedule, but cannot use video and activity schedule at the same time.
- The ability to back up your schedules to your computer.
- The ability to restrict editing, clock, libraries, notes, and activity schedules.

Price: $6.99
iPad only

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

The Zones of Regulation

- Made by : Selosoft, Inc.

- "The Zones of Regulation (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

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

iDo Hygiene

- Made by : C.E.T - The Center for Education Technology
- iDo Hygiene teaches personal hygiene daily activities (teeth brushing, shampooing , hand washing, toilet training, taking a shower , public bathroom, etc.).
- Watch step by step demonstration videos and picture sequences, and make your own.
- Suitable for children, teenagers, and young adults.
- The iDo Hygiene Application includes 12 units + a game.
- In each unit:
- - A video presenting a teenager demonstrating the activity, step by step.
- A sequence of the task's steps in images, accompanied by narrated text for each stage.
- A tool to create a personal video of the task, directly from the application.
- Learning games to practice understanding of the sequence.

Price: Free (in app purchases) + 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.

DPS
DIGITAL PROBLEM SOLVER

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

Actions In Video

- Made by : Geraldine Moran
- Free Lite version.
- Created by a speech & language therapist/pathologist to work on actions (verbs) and basic sentence structures.
- Actions in Video uses video modeling, and color-coded systems to support.
- Features:
- 49 core actions
- Real people demonstrating each action in 3 separate scenarios
- 154 videos of actions modeled
- Person & action, and person, action & object sentence structures targeted
- Promotes errorless learning
- Mix of male, female, adult and child audio, modeling correct sentence production
- Record feature that allows users to repeat sentences
- In-app tutorial
- Levels of complexity can be increased, including the removal of color-coded supports

Price: $33.99

+ Universal

Autism iHelp – Comprehension

- Made by : John Talavera
- Same developer has about 20+ apps in different categories.
- A vocabulary teaching aid developed by parents of a child with Autism and a speech-language pathologist.
- Autism iHelp - Comprehension targets fundamental receptive language skills in a variety of formats. While utilizing real-life photographs, this app requires the learner to listen and follow directions of varying complexity. Comprehension of one- and two-step directions is essential for academic success on a fundamental level, and builds on short-term and auditory memory skills. Options include written directions and verbally presented directions.
- Progression tracking.

concepts

Price: Free
$3.99 in app Purchases
+ Universal

Starfall

- Requires a StarFall Membership.
- Interactive Videos and Games teaching Children Primary education skills such as ABC's and Counting.
- The Starfall Free app requires an internet connection.
- Not all content available yet, they are continuing to add more.
- Starfall also has paid companion apps such as Starfall ABC's, Starfall: All about me

Price: Free - $1.99 + Universal

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

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

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

Phonics Genius

- Made by : Innovative Mobile Apps

- Over 6,000 words grouped by phonics sounds.
- This app is specifically designed to help students recognize and distinguish words by sounds.
- Over 6,000 professionally recorded words carefully grouped into 225 categories by phonics.
- Multiple unique game (quiz) modes from easy (2 words only) to challenging (6 words per page)
- Phonic highlights accelerate learning - students can see the phoneme that is being emphasized in each lesson via highlights
- Ability to add your own cards - you can add an unlimited number of new words and record your own voice
- Add new lists - you can add and group flash cards into customizable lists which is ideal for learning
- Customizable font size, font color, spelling (upper case, lower case, etc.)
- Continuous looping feature

Price: $.99

+ 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

- From Monarch Teaching Technologies.

- The player for an award winning suite of visual lessons.

- VizZle includes Build-a-Book, Matching Board, Sorting Board, Game, Scheduler, and Phonics Plus Beta

- The player allows you to play back VizZle lessons.

Price:
Subscription
+ iPad Only

Keynote

- By: Apple Keynote is Apple's version of Power Point.
- Create keynote presentations on your mac and upload them to your iPad.
- One would not think of it as an educational tool, but it has many potential uses.
- Create Social Stories
- Create Schedules

Price: Free + Universal

My Play Home…

- Made by : PlayHome Software Ltd
- Free version My Play Home Lite
- Other versions: My Play Home School, Hospital.
- My Play Home is like an interactive Dollhouse that you have full control, for education this gives the instructor the ability to create a Visual Scene Cue.
- This can be used to create social stories or teach individuals about such constructs as Prepositions and spatial concepts.

Price: Free - $3.99
+ Universal

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

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

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

Proloquo2go

- By AssistiveWare - AAC App

- Use camera on device to quickly add image to the users language.

- Tap an image and it speaks, build sentences with images.

- Currently over 60 voices to choose from with Male, female, and children voices for different dialects and regions.

- Easy to backup to iTunes and Dropbox, can transfer Student's Library to other devices.

- Has a default vocabulary sets.

- very intuitive, easy to use, & customizable

Price: $249.99
+ Universal

AAC Genie

- By Hump Software

- AAC Evaluation Genie is am assessment app to assist Speech Pathologists in the selection of a particular device or software to assist an individual.

- There are 14 subtests that can be administered with screening options available for each subtest.

- Visual Identification, Visual Discrimination, Noun Vocabulary, Function Vocabulary, Verb Vocabulary, Category Recognition, Word Association, Category Inclusion, Category Exclusion, Pixon Core Vocabulary, Unity Core Vocabulary, Unity Icon Patterns, Picture Description, Word Prediction

Price: $11.99
iPad

Social Detective

- The Social Detective app teaches children with Autism how to appropriately engage in everyday situations. It teaches them how to use their eyes, ears and other senses to make smart social guesses and investigate clues to see how others' emotions and responses are connected to their own behavior.
- The You Are A Social Detective Beginner App allows the child to choose their own avatar and earn their social detective tools as they learn how to improve their social skills.
- You can track and share progress by emailing graphs and percentages of outcomes after playing.
- Uses real life scenarios and video modeling to teach social skills.

Price: $24.99

iPad & iPhone

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

Emerging Technologies

WebMoti

- Telepresence hardware and software which allows students who are on the autism spectrum participate in the classroom without the over stimulation of being in the classroom.
- Through this interface the student can manage the sensory input of the classroom from a remote setting.
- Combination of camera system and a specialized chair that allows for tactile in put through vibrations.
- Currently in testing in the testing phase for Toronto District School Board.

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.

Virtual Autism Experience

- The National Autistic Society has released a VR experience of what it is like to be an individual with Autism. The VR experience is from the perspective a boy and while he is waiting for his mom to take money out of a ATM. In this experience you will hear the sounds and see situations that are amplified by Autism.
- This experience can be done through youtube using Google Cardboard.
- Google cardboard is available for both iPhones and Android.
- https://www.youtube.com/watch?v=DgDR_gYk_a8

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.

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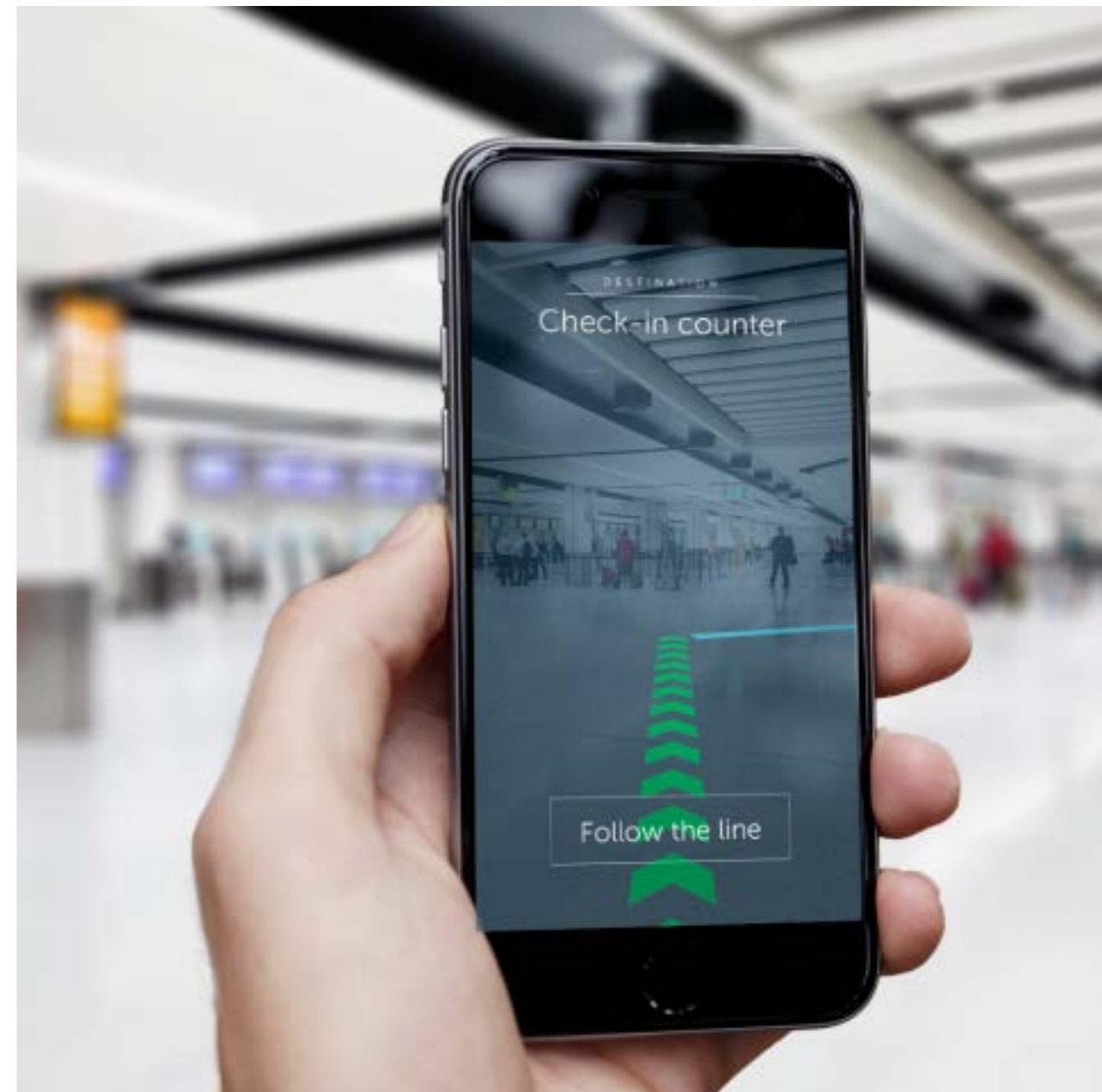
Intel Vaunt

- Announced February 5th
- Vaunt is Intel's attempt into the smart glasses industry and to learn where Google Glass failed.
- "There is no camera to creep people out, no button to push, no gesture area to swipe, no glowing LCD screen, no weird arm floating in front of the lens, no speaker, and no microphone (for now)." - The Verge.
- Vaunt is attempting to learn from google glasses mistakes which inevitably - put the project on hold.
- Any smart AR device has the ability to profoundly change the lives of individuals with Autism.
- Source: "https://www.theverge.com/2018/2/5/16966530/intel-vaunt-smart-glasses-announced-ar-video"

Microsoft HoloLens

- HoloLens is a set of smart glasses, that allows the user to see "Holographic" interfaces in their surroundings.
- An example of this would be that you could walk up to your fridge, and see an interface projected onto the fridge that acts as an order form for an online grocery store.
- This is similar to Google Glass
- HoloLens was demoed at the Windows 10 announcement, and was said to be released in the lifespan of Windows 10.

Detecting Emotions

- The The Fraunhofer Institute for Integrated Circuits (Fraunhofer IIS) has been working on an image analysis system for many years. It allows them to detect age, gender and emotion.
- When a person is experiencing feelings they are often conveyed through facial expressions and body language.
- Using the built in camera and facial recognition the device can tell them the emotions the person is most likely feeling.
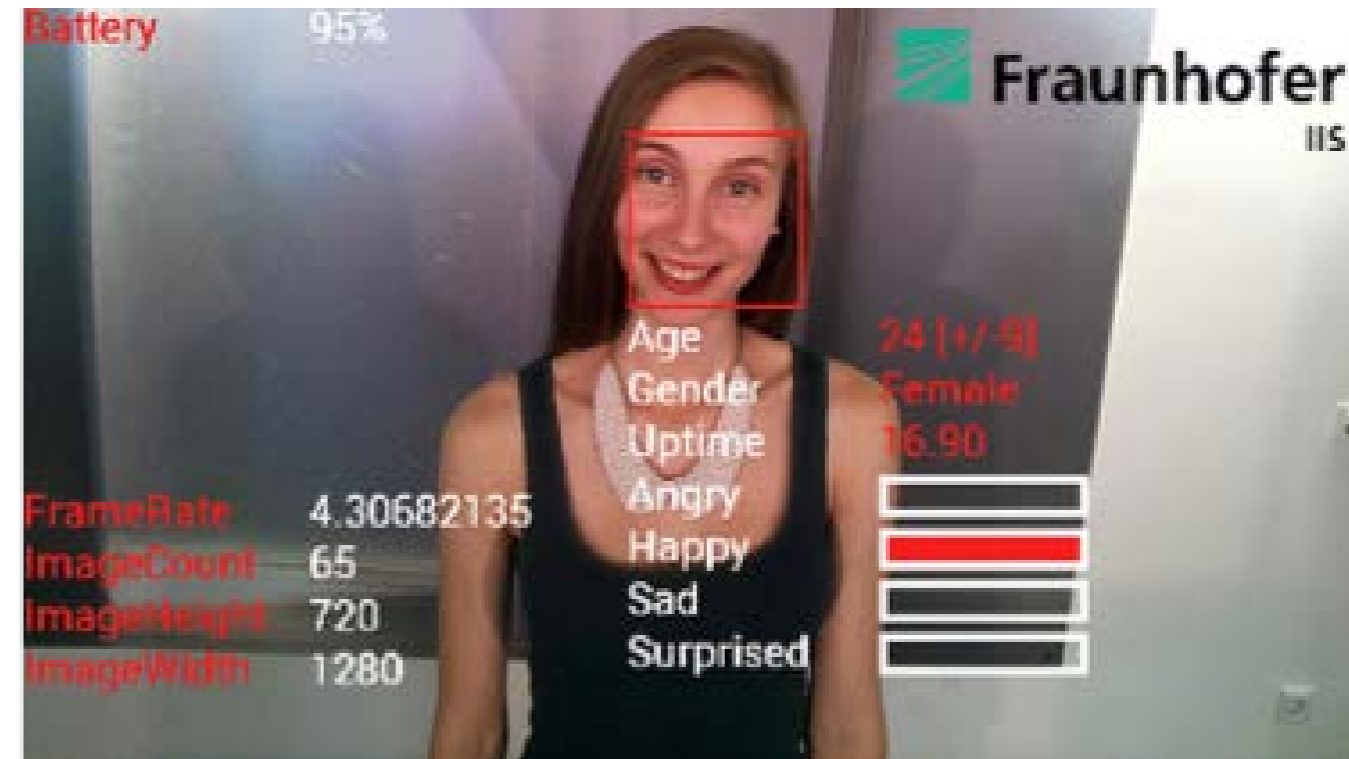
Brain Power

- A startup that is using Google Glass to allow the user to see symbols of the a persons emotions.
- It then rewards them points based on if they chose the right emotion correctly.
- It is important to note that GOOGLE stopped development on Google Glass.
- Models previously produced can still be found on eBay.

Brain Power
Video

Making Sense of Symbols

- AR devices could help a person make sense of more items in their surrounding.

- Deciphering complex symbols like street signs.

- If the individual is unable to read a device might be able to alert the user by speaking the message, providing a visual sign they understand and more.

CAUTION CHILDREN

Monarch Center for Autism

A *Division of* Bellefaire JCB

Services

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- Transitional Education Program

- Boarding Academy

- Adult Autism Program & Residence

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- Summer Social Language Program

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- **Web**: www.monarchcenterforautism.org

- **Telephone**: 216.320.8945 or 1-800-879-2522

- **Address**: 22001 Fairmount Boulevard, Shaker Heights, Ohio 44118

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Questions ?