New Media Resources for Special Needs Apps & Other Digital Resources

The quantity and variety of new media resources for children and adults with special needs has exploded in the past five years, including many apps for both specific disabilities and uses. There are also many references online in blogs by educators, therapists and caregivers who have tailored the use of apps for a general audience to meet unique and specialized purposes for children and adults with disabilities. This is especially true for apps for Autism & other developmental disorders. This list of websites, resources and apps is not meant to be exhaustive, but is a good starting point and useful for the reference desk in a public or school library.

Apps and Autism: Barbara Klipper - June 2013 issue of American Libraries Magazine - http://www.americanlibrariesmagazine.org/article/apps-and-autism — Among Klipper's wonderful suggestions for evaluating "tools to serve children with special needs", is this great list of features to look for in apps:

- Does it have images as well as text?
- Are the images realistic pictures or photographs?
- Does it include video modeling (demonstrating the lesson with a video)?
- Does it provide reinforcement (rewards) and errorless learning?
- Can you set the difficulty level, the number of pictures on a screen, or the space between pictures so it won't be overwhelming for a child with autism?
- If there is a timer, can it be turned off?
- Can you turn off speech or other sounds?

Klipper also notes that "every app that is suitable for teaching kids with ASD will not have all of these features, but a good app will have at least some"

Apps for Children with Special Needs (A4CWSN) – A4CWSN is a community with a large and active Facebook page - https://www.facebook.com/a4cwsn - and website with app reviews, articles and more. The organization also gives away iPads to needy families and does video reviews. http://a4cwsn.com

Apps for Speech Therapy - Many professionals that use apps have national organizations with websites that list apps and other digital resources. This is a good example, from ASLHA - American Speech-Language-Hearing Association: http://www.asha.org/SLP/schools/Applications-for-speech-language-pathology-practice

CommonSenseMedia.org – CSM is exceptional for media curation and evaluation, including many formats for children's content. They review everything from paper books and magazines to movies, video games and apps. They have more than one resource for Special Needs, so it's worth exploring their site (they are prolific and things are added often).

- Among the best CSM resources are the ones curated at: <u>https://www.commonsensemedia.org/guide/special-needs</u>. This list includes browsing apps-for-special-needs in six categories: Communication, Social Interaction, Organization, Reading, Mathematics and Motor Skills.
- In 2013, CSM added a whole new site that is still evolving, called Graphite https://www.graphite.org. In addition to digital resource lists and app ideas using their "common core explorer" (http://www.graphite.org/standards/common-core), this site has a number of user created 'boards' on a variety of topics, similar to Pinterest http://www.graphite.org/boards.
- The blogs run by CSM are also a great resource. There is a CSM Parent Blog: https://www.commonsensemedia.org/blog CSM Educator Blog: https://www.commonsensemedia.org/educators/blog and a new Graphite

Blog: http://www.graphite.org/blog/ (This is the link for the one list we will go over for demos during training: http://www.graphite.org/blog/5-special-needs-apps-for-language-skills)

Inclusive Early Literacy - Blog by Tess Prendergast, children's librarian & Doctoral Candidate at the U. of British Columbia's School of Language & Literacy Development and LittleeLit advisory board member. http://inclusiveearlyliteracy.wordpress.com

MomsWithApps.com – This site does not specifically recommend apps or review apps, but is a developer community committed to best practices for creating quality apps for families and children. This is the list of apps designated as "special needs" by the independent developers who are members of the group: http://blog.momswithapps.com/apps-for-special-needs/

OnePlaceforSpecialNeeds.com – This site, by Dawn Villarreal, was created by a special needs parent for parents, designed to be a "complete guide to educational and special needs apps". It has a searchable database with lots of resources beyond apps, including tips about everything from shoe tying to getting help with serious mental health conditions. App resources: http://www.oneplaceforspecialneeds.com/main/library_special_needs_apps.html

SmartAppsforSpecialNeeds.com – This site was created by Ron Engel, founder of SmartAppsforKids.com & SmartAppsforAndroid.com. These sites are currently the most well-trafficked and consistently critical sources for reviews of a wide variety of children's apps for both Android & Apple formats. They regularly publish reviews as low as 1/5 star, alongside the usual 4 & 5 star recommendations. http://www.smartappsforspecialneeds.com

TechinSpecialEd.com – This site has a number of useful features, with hundreds of apps reviewed. IEP – Individual Education Plan – goals are suggested for each app, a useful feature for special education alignment in the U.S. http://www.techinspecialed.com/recommended-apps-by-iep-goalsskills-and-some-useful-tools

The National Autistic Society (UK) - Using technology - guidance for parents: http://www.autism.org.uk/technology

Top 200 Websites:

One additional resource to have on hand for those without access to new media devices or seeking online resources is this list from Examiner.com. It is sensitive to the needs of children with disabilities and wonderfully titled, "200 Best Educational Websites For Children Of All Ages And Abilities". (June 2013) http://www.examiner.com/article/200-best-educational-websites-for-childrens-of-all-ages-and-abilities

App Examples for Our Training Demos:

From Barbara Klipper – (two apps she likes to use with older kids that were not included in her ALA article):

Ruby Cube apps – https://itunes.apple.com/us/app/storysmart1-trudy-goes-to/id621385025?mt=8 [storysmart1: Trudy Goes to the Beach - Social Language Skills]

\$3.99 Each of the apps from Ruby Cube consists of an interactive story, with the reading comprehension level aimed at upper elementary-school aged children. The stories are "designed to help them develop social communication, social cognition, critical thinking and narrative skills".

Put it Away – https://itunes.apple.com/us/app/put-it-away/id494750234?ls=1&mt=8

This app shows different rooms with items out of place. The user drags and drops the objects into their proper locations. It's fun and educational for a child or teen learning activities of daily living. It's also good for eliciting language and labeling objects. The app can be customized with photos of real rooms, so kids don't have to generalize from sample rooms to their own homes.

New Media Resources for Common Core - Non-Fiction

One of the biggest explosions for children's content in the digital realm is in the genre of nonfiction and apps & eBooks aligned with US educational state standards for Common Core State Standards (CCSS). These lists help teachers align curriculum and teaching goals with apps and other digital content. Since teachers must plan their lessons with documentation to show common core tie-ins, using apps and other digital resources is often dependent upon not only the quality of the software but the ability to show how it fits into expected instruction for each subject.

For reference, the "Key Shifts for English/Language Arts" that impact children reading, include:

- 1. Regular practice with complex texts and their academic language
- 2. Reading, writing, and speaking grounded in evidence from texts, both literary and informational
- 3. Building knowledge through content-rich nonfiction

Content-Rich Non-Fiction is available in large quantities, especially in apps & eBooks, however evaluators need to have a steady eye on this new medium. When non-fiction is the source of digital information, the publisher and author/illustrator credits are more important than ever.

When evaluating non-fiction (print or digital), also consider different writing styles:

Expository (explains, describes, informs)
Narrative (reads like a story)
Poetic (present info through poems)
Descriptive (uses sensory details)
Persuasive (argues a position)

Additionally when reviewing digital titles, consider any links or scaffolding for learning that the interactive text may add to or detract from, for reading comprehension. Reading level information can also be useful, but may not be as critical for eBooks & apps that include assistive technology features like audio narration and word-for-word highlighting.

From WeAreTeachers.com - the following FIVE tips are recommend for evaluating non-fiction for common core use:

- 1. Choose High Interest Topics
- 2. Look for Openings for Discussion
- 3. Connect It to Kids' Lives
- 4. Opt for High-Impact Visuals
- 5. Think About What Comes Next

http://www.weareteachers.com/hot-topics/special-reports/finding-quality-nonfiction-for-the-common-core

Resources:

School Library Journal - Best Apps for Teaching & Learning 2014:

http://www.ala.org/aasl/standards-guidelines/best-apps/2014

Common Core Explore from Common Sense Media - For Language Arts, Mathematics & Science:

https://www.graphite.org/standards/common-core

Best Apps for Teaching & Learning - AASL (American Association of School Libraries)

http://www.ala.org/aasl/standards-guidelines/best-apps

Digital-Storytime - Non Ficition Category: http://digital-storytime.com/top10.php?id=64

Common Core IRL (In Real Libraries) - Book Bloggers List By:

Alyson Beecher, district literacy specialist: <u>Kid Lit Frenzy</u> Louise Capizzo, children's librarian: <u>The Nonfiction Detectives</u>

Travis Jonker, school librarian: 100 Scope Notes

Cathy Potter, school librarian: <u>The Nonfiction Detectives</u> Mary Ann Scheuer, school librarian: <u>Great Kid Books</u>

http://greatkidbooks.blogspot.com/search/label/Common%20Core%20IRL

AppoLearning - Apps endorsed are curated & evaluated by a panel of teachers, parents, and app gurus. Every app is given a Report Card based on a proprietary "appoLearning" Rubric. Ratings are based on a number of factors, including Educational Content, Kid Appeal, Assessment, Features and Design, Value, and Safety and Privacy. https://www.appolearning.com/

Apps with Curriculum - AWC provides educators with a course of study for each app that is cross curricular in subject areas and involves technology with education. Every app also has alignment to Common Core Standards: http://appswithcurriculum.com/

Kirkus Reviews - Best Apps & eBooks of 2013 for Kids: https://www.kirkusreviews.com/lists/best-nonfiction-apps-and-e-books-of-2013-for-kids/megamammal-meg/

MomsWithApps - Discover Kids Apps (online tool):

https://momswithapps.com/discover

We Are Teachers - Finding Quality NonFiction for Common Core:

http://www.weareteachers.com/hot-topics/special-reports/finding-quality-nonfiction-for-the-common-core

MindShift Blog (KQED) - Apps That Rise to the Top: Tested and Approved By Teachers

http://blogs.kqed.org/mindshift/2014/06/apps-that-rise-to-the-top-tested-and-approved-by-teachers/

Children's Non-Fiction Conferenence - http://www.childrensnfconference.com/

TeachThougt.com - Common Core Resources:

http://www.teachthought.com/teaching/50-common-core-resources-for-teachers/

10 apps and websites featuring Common Core resources for middle school:

http://www.amplify.com/viewpoints/10-apps-and-websites-featuring-common-core-resources-for-middle-school

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New Media Resources Multi-Cultural Apps & Digital Resources for Diversity

New Media presents a unique opportunity for content curators to recommend more diverse books in app or eBook formats. It also has opened up the door for consumers, educators, librarians and other professionals to advocate for more multicultural storytelling for children.

The flip side of this wonderful opportunity, however, is a digital tidal wave of content that is also painfully diverse in quality. There were a number of barriers for a new author who wanted to enter traditional picture book publishing in the 20th century, with an average of 5,000 titles published each year for children vs the staggering new media content numbers, totaling more than 2,000 apps a day (in all categories). The challenge is to dig up the very best of this new diverse content, encourage/empower our diverse communities to tell their own stories in digital, agree on basic minimum standards for quality and think outside-the-box in a 21st century way about content creation in general.

It is imperative that we include criteria for diversity to any rubric being used to evaluate library materials, just as we would include criteria for developmental needs. Like all new things, new media is evolving, so there are still not enough good content options for certain populations, languages and cultural experiences. This means it is also useful to know about apps that are a blank slate for creating children's stories, especially if no quality picture book apps or eBooks match the storytelling needs of children of color.

Book App Recommendations:

The very best list to date was created in 2014 for the annual ALA conference in Las Vegas by **Marianne Martens**, Ph.D. - Whet Your APPetite: Multicultural Apps for Young People - This 6-page .pdf document has detailed information about 18 multi-cultural storybook apps: https://littleelit.files.wordpress.com/2014/07/martens-whet-your-appetite-mc-annotated-list.pdf

Other good resource sites to use include **CommonSenseMedia.org** using keywords or lists like this one on "Cultural Appreciation Games, Apps, and Websites" https://www.commonsensemedia.org/lists/cultural-appreciation-games-apps-and-websites

Digital-Storytime.com has a robust search engine for their 900+ book reviews, so using keywords can also be helpful, plus they have a category listing for apps with "Diversity or Multi-Cultural Themes" that is updated with new reviews regularly: http://digital-storytime.com/top10.php?id=132

Many individual apps also contain multicultural stories, like **Kite Reader - Multicultural Collection**: http://kitereaders.com/catalog/subject/multicultural-collection

For **eBooks**, the best resources are available via **Kindle** (even for iPad use, since iBooks has a less robust discovery engine). Because they have many good indexes for print books, Amazon's catalogue of "Multicultural Stories: Kindle Edition" has over 1500 eBook titles broken down by ages for kids from one to twelve AND by cultural group: http://amzn.to/1oWOBOX

- Books
- Children's Books
- Geography & Cultures
 - Multicultural Stories
 - African-American (537)
 - Asian & Asian American (120)

- Hispanic & Latino (212)
- Native North & South Americans (269)

Print vs Digital - Keeping an Eye on Publishing Back-Lists:

Picture book titles for children can have short lives before going out-of-print, so it is also useful to watch for your favorite multicultural stories (or look at online lists), since many author's back-lists are now candidates to be released as eBooks, apps and other new media formats. Several great resources exist, like:

School Library Journal (2014) - Culturally Diverse Books

http://www.slj.com/2014/05/diversity/culturally-diverse-books-selected-by-sljs-review-editors

Common Sense Media (2014) - Help Your Kids Find Books with Diverse Characters

https://www.commonsensemedia.org/blog/help-your-kids-find-books-with-diverse-characters

Common Sense Media (2014) - Books with Characters of Color

https://www.commonsensemedia.org/lists/books-with-characters-of-color

Cooperative Children's Book Center, School of Education (Univ. of Wisconsin-Madison - 2012) - 50 Multicultural Books Every Child Should Know

http://ccbc.education.wisc.edu/books/detailListBooks.asp?idBookLists=42

Center for the Study of Multicultural Children's Literature (CSMCL) - on Facebook at:

https://www.facebook.com/pages/Center-for-the-Study-of-Multicultural-Childrens-

<u>Literature/238909969517173</u> - This Children's Book Council initiative has a site just for diversity issues in children's books - http://www.cbcdiversity.com - **BEST MULTICULTURAL BOOKS OF 2013**:

http://www.patmora.com/images/blog-best-multi-2013.pdf

Multicultural Books for Children: 40+ Book Lists (compiled by @PragmaticMom) Includes:

Multicultural Books, Civil Rights Movement Books, Native American Books, Asian American Books - with subcategories (Korean American, Japanese American, Chinese American, Southeast Asian) http://www.pragmaticmom.com/multicultural-books-for-children/

Apps to consider:

Round is a Mooncake HD - https://itunes.apple.com/us/app/id402213435?mt=8 (\$2.99)

A Song for Miles - https://itunes.apple.com/us/app/id439529857?mt=8 (\$2.99)

The Great Sasquatch - https://itunes.apple.com/us/app/id714350212?mt=8 (\$2.99)

Curly Hair/Straight Hair - https://itunes.apple.com/us/app/id469512365?mt=8 (Free)

Up & Down - https://itunes.apple.com/us/app/id560485488?mt=8 (Free)

One Globe Kids - https://itunes.apple.com/us/app/id477746969?mt=8 (Free, In-app purchase)

Being Global - https://itunes.apple.com/us/app/id435406450?mt=8 (\$1.99)

Electric Company Party Game - https://itunes.apple.com/us/app/id592510678?mt=8 (Free)

ABC Music - https://itunes.apple.com/us/app/id420949855?mt=8 (\$2.99)

Touch & Learn - Emotions - https://itunes.apple.com/us/app/id451685022?mt=8 (Free)

Additional resources - LittleeLit Blog, including these great posts:

Resources to Support Dual Language Learners in Storytime, by Karen Nemeth

http://littleelit.com/2013/11/26/resources-to-support-including-dual-language-learners-in-storytime-by-karen-nemeth/

Diversity & Multi-Cultural App Presentations - ALA 2014

http://littleelit.com/2014/02/28/diversity-multicultural-apps-presentations/

Rapid Reviews to Whet Your Appetite - Diverse Audiences

http://littleelit.com/2014/07/05/whet-your-appetite-rapid-reviews-of-apps-for-children-from-preschool-to-tweens-alaac14

New Media Resources for App Evaluation Basic Framework & Tips for Librarians

Recommending apps for children can seem daunting at first, even for seasoned librarians because of the newness of the format. With apps, it can be helpful to 'expect the unexpected' when reviewing. Evaluators need to watch for hidden features, test basic settings thoroughly and be mindful of the impact of updates (or lack thereof) on content over time. To get started:

- Use <u>Every Child Ready to Read</u> The Five Practices (sing, play, talk, read, write) make a great
 guide or starting point for the evaluation process, as an early literacy framework when focusing on
 young children.
- Consider the Goal Digital is just one tool among many, not always best (don't use apps just for the sake of using an app in your programs).
- Consider the Context, Content and Child(ren) ~ Lisa Guernsey, Screen Time
- **Test Every App** thoroughly before sharing it with a child. Look for ease of use, stability and ample settings that include navigation and flexibility for a variety of uses.
- Use Developmentally Appropriate Guidelines as a litmus test when selecting apps, for instance:
 - Birth to 2 Focus is on relationship with caregivers, so look for apps that connect/engage children with a caregiver, but use judiciously. Don't forget to consider the caregiver's engagement as a way to enhance any of 5 practices.
 - Age 3-6 Focus is on relationships, including peers. Look for engagement with others, dialogic reading opportunities, turn-taking, etc., as well as literacy supports like highlighting word-for-word in eBooks & apps.
 - Age 7-11 Focus is still on relationships, but it is also important to consider engagement with subjects the child enjoys. This helps to foster a love of learning and reading, essential at this age when many avid readers become reluctant. Finding apps that go deeper into non-fiction topics, or support socio-emotional development, is ideal. School-aged app selection can also be guided by common core, but home use should be child-driven as much as possible.
 - Age 12+ Adolescents are developmentally tasked with the "Four I's" (independence, identity, integrity and intimacy) but they are also Icebergs (much goes on below the surface, often expressed in a need of privacy). Give them plenty of choices from quality content that builds on these skills. Apps that teach them how to protect themselves and manage their own digital citizenship are also good choices. Content creation for self-expression is particularly important for this age group.
- Draw on Criteria for Evaluating Paper Books, adding new ones for a new medium, like in this
 table presented by Carisa at annual ALA, 2014 during <u>ECRR 2.0: Using Apps & eBooks in Early</u>
 Literacy Programs:

Criteria Consistent Across Formats	New Criteria to Consider for Digital Relevant enhancements that support narrative				
High Quality Illustrations					
Easy to Read, Large Font	Seamless integration of features & enhancements.				
Developmentally Appropriate Content (Length, Reading Level, Topics, Language)	Audio & Sound effects that don't interfere with voice- over or other features.				
Well-written, nicely paced & chunked text	Technical polish, stability, ease of use & navigation settings, flexible use.				
High Quality Content (not thinly disguised advertisement for game, movie, food, etc.)	No ads, in-app purchases & links that leave the app (unless under sufficient 'parental gate').				

Engaging content worthy of many return visits	Clearly identified author/illustrator/producer.				
Ways to extend beyond the book	Quality games or other extras (if present) that do not interrupt narrative or reading comprehension.				

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Tips - Important things to watch out for in the digital environment:

- Coercive monetization In-app purchases are not all created equally. If present in apps for children, then they should be under a parental gate and for older kids, not disguised in any way to confuse or encourage purchases.
- Links Especially in apps for young children, any links that leave the app without a parental gate should be avoided when possible. Put device in airport mode or use guided access if links are present in an app you consider quality in all other ways.
- Advertisements Ads, even for other apps in a series should be tucked away under a parental gate, especially for ages 8 and under.
- **Privacy Policy** Apps are required to not collect or share identifiable information from kids under 13, so look for basic COPPA compliance. [Children's Online Privacy Protection Act]
- Poor Quality In the self-publishing environment, watch out for apps with grammatical errors, poor translations, clunky interfaces, and other technical glitches. Aggressively test apps and all their features.
- Updates Digital apps are updated regularly for free, including the addition of features and
 content. Storytime can be thrown off by changes in the app's content or navigation, especially
 when the addition is unwelcome (like ads or new in-app purchases). OS (Operating System)
 updates also can change the way an app functions, especially if the app is not well supported with
 stability updates.
- Easter Eggs Some surprises in digital are meant to be pleasant, like the 'easter eggs' or hidden enhancements that many developers put into their digital content. For instance, Pat the Bunny includes literal Easter eggs during the weeks leading up to Easter in an update that is seasonal.
- Aging Apps/App Rot As digital content ages, it can become unstable or even, in rare cases, removed from the AppStore entirely. Some content is removed by the publisher for business reasons, but most content that is removed is simply unsupported by the developer when they go out of business in this fast changing environment. This means that any content that is not currently installed on a device cannot be reinstalled from the AppStore unless you have backed up the device to a computer (not a common practice).

Where to find good apps:

The AppStore can provide some initial suggestions, but most of the time you will need to leave for outside sources online. Aggregator sites, like <u>Appshopper.com</u> are useful for tracking a wish list and watching for price drops, especially on Fridays and holidays, but for deeper curation, there are many sites to consider:

Non-Profit/Traditional Book Review Sites:

- Common Sense Media Excellent overall resource for media reviews, especially the new app/site called Graphite, which includes alignment for common core.
- Children's Technology Review Subscription based site recommended for all libraries, using a thorough rubric for children's media across formats.
- Kirkus Reviews iPad app & ebook reviews are done in a similar fashion to their print reviews, including their coveted 'Kirkus Star'. Children's book apps are not separated out from adult content, however.
- Horn Book Now including weekly reviews for apps & ebooks for kids.

SLJ, Touch & Go Blog – A weekly publication reviewing school-aged apps.

Commercial Review Sites - Seek out trusted/respected sites with clear info about their review process. This is a short list of sites to consider, but by no means exhaustive.

- http://digital-storytime.com
- http://smartappsforkids.com
- o http://theimum.com/
- o https://www.appolearning.com/
- http://www.appymall.com/
- http://bestappsforkids.com/
- http://www.funeducationalapps.com/
- o http://www.kindertown.com/
- https://SmartappsforAndroid.com/
- http://teacherswithapps.com/
- o http://theiphonemom.com/

Note: When seeking review, authors & developers often look for sites with low Alexa ratings (a rating system that measures website popularity - the lower the rank, the more traffic a site likely gets) and an active list (updated daily) of the most popular kids app review sites & general app websites can be found at ReviewforDev.com:

Kids App Review Sites: http://www.reviewfordev.com/list-of-review-sites-to-find-the-best-educational-apps-for-kids.php

All App Review Sources:

http://www.reviewfordev.com/ipad-and-iphone-app-review-sites-the-list-to-promote-ios-apps.php

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