

A Day in the Life: Using Technology & FREE iPad apps to ENGAGE, MOTIVATE & SUPPORT Students in Contained Classrooms

By: Erica Glover

Erica Glover, ASD Contained Class Teacher at Queenston Drive Public School, PDSB
erica.glover@peelsb.com

Tricks of the Trade

Use of Technology: I use technology every morning to begin my students' day in the same way. I am fortunate enough to have an Epson Interactive Whiteboard and I use the Epson Easiteach program to create various interactive activities. I create different attendance style activities that the students complete upon entering the classroom. It gives them a consistent focus every day. I try to change the activity every couple of months but the goal is always the same; to slide their name somewhere to let me know that they are at school. Recently I have begun adding instructions for the Morning Work activity on the attendance image and that has worked well to get them thinking and engaged in learning pretty well right away in the morning. These morning activities are meant to help transition the students to school and such I try to keep them as engaging and little stressing as possible. This is the time that I commonly use some of the apps that I will be talking about.

Organization: I have all of my students' iPads looking the same way. All apps are in organized in specific folders with the same titles. I don't do this for the students, I have this done for the adults in the classroom. This way, when I'm teaching a lesson I give the instruction to go into the "Writing Folder and open the such & such app" the classroom TAs know exactly where each of the students should be going. I also have each iPad personalized visually by having a screenshot (that the students have created) of each student as the background. This way when the iPad is turned on, you can see who's face is on it and know whose iPad it is ---- because as we all know, masking tape doesn't really stick very well to the cases on our iPads.

Independence: both ours and that of our students, will only happen with the REPEATED use of the app. Don't get frustrated (okay get frustrated, because you will) BUT don't give up on an app just because it doesn't work the way you think it should. You often need to try it several times. And see if the students can make it work. If everyone then feels frustrated, then yes, move on.

Motivation: I love to explore new apps and they are constantly changing. In the past, I would have spent hours of my own time, finding, exploring and installing these apps onto my students' iPads. Now that I have allowed myself to let my students have some ownership over their assigned device, it really has made my life easier. We now often take time on a Monday morning to explore the app store and find apps around a specific theme, like Anti-Bullying for our recent PINK Day or Earth apps for this today's Earth Day. I will often do some preliminary searching but now I also let the students find and share. By doing this, we had a seemingly real bunnies hopping through our classroom on the Thursday before the Easter weekend, courtesy the "Bunny Fingers: Augmented 3D Reality" app that one of my students discovered. That was a real fun experience for the kids.

FREE apps: There is no perfect app!!!!!! But I have found through experience that the developers are often open to suggestions (hence the dreaded updates) so take advantage of their eagerness to please people. Let them know what you need the app to do for you. There is also usually reason why there are free and paid apps. The free apps will often be good, but they can often lack functions which the paid apps will have. Hence the difference between "lite" and "full" versions. All of the apps I will be sharing with you today are FREE and they are not all perfect. But they are good and allow our students to be engaged and successful learners. Also, with the Free apps, I like to think that I'm "using them" until I don't need them anymore. Often times, the first part of the app (for example, a magazine app), is free and then they think they've hooked you and you'll buy a subscription or the full version. I know longer worry about this but rather, since I tend to get bored easily, (like a lot of our students), I simply now think "While that was fine but what else is out there?" Simply have your students delete the app (it will go to the cloud for next year's students to use) and move on.

Communication & Language apps

A) Sharing of Ideas



Dropbox (Free account)

I take a ton of photos in order to use for student learning. The use of **“DropBox”** is great for syncing and sharing all of the photos that you take in the classroom, on field trips, during special events, etc. to your students’ devices. You can also share work assignments easily using Dropbox as it allows you to share all sorts of files. I like it because I can easily create a work assignment on my home laptop and save it to my Dropbox. I can also quickly and easily send photos that I take on my phone to my Dropbox account. Once the Dropbox app is installed on your students’ iPads, you just need to do an initial logon with your account and password. This information will save. This means that the files in Dropbox are easily and quickly accessible for your students whenever they need it.

Now that we are using the iPads so much, I have explored many different writing apps that allow us to use our photos. There are a lot of different story creating or photo-based apps out there. I find that they all have good and bad points. The following apps are ones that I find are the LEAST frustrating for both my students, my TAs AND myself.



Our Story

This is my number one, go to writing app. You can quickly insert photos from your camera roll and then create a sentence or two explaining it. I use it all the time to create social skills or help explain upcoming expectations about things.

Using the microphone feature, you can record yourself reading the text of your story.

Once the story is complete, you can email it to yourself as a PDF which can then be printed into a hard copy if you like. Students find this app easy to use and demonstrate good independence with creating stories after only one or two times of using it.

It is limited in the amount of text that you can see on the screen at one point, and that can be frustrating for some students.



Tangible Memories

This app was originally designed to support senior citizens who struggle with remembering memories. It is a simple, but pretty app that allows you to create a visual scrapbook. It allows for one photo per page. You can write quite a lot of text, and see all that you have written on the page, which is a really nice feature. You can also self-narrate the story which is a wonderful feature to use with our students. You can write up to 30 different pages per story and save a number of stories. Because it was designed to use with seniors on iPads to directly facilitate the communication of memories, it is difficult to externally share the story. You can email but have to do this page by page. I have found it's much easier to have my students screenshot each page and then do a mass email from their camera roll.



Story Creator

This app is a very clean, simple app that allows students to create simple writing pieces. I use it a lot for recount writing. It allows you to access photos from your camera roll or directly take photos using the iPad's camera. Because it does not give direct access to Dropbox, my students have learned to go into Dropbox first, choose the photos they want to write about, save these photos to their camera roll and then begin their writing in the Story Creator app. Once you show them how to toggle between Dropbox and another app, they quickly get very good at doing this. This app allows students to narrate and record their

writing, and then play it back within the app. It also allows you to email a completed writing piece as a PDF which can then easily be printed off. Within the app, you can only see up to two lines of written text, but when emailed, each page is printed out fully with all written text clearly showing.

***I have started giving my students the option of which of these Writing apps they want to use for my writing assignments. It's interesting to see them justify why they prefer the app that they do.



PicCollage

While this app was originally designed to take photos and creatively add stickers and text, I have learned to have students use it to create simple one page visuals. Most recently my students researched famous people with an ASD and then did a PicCollage to share their biography. It was a simple but effective way to show their learning.

We are also doing a Math Inquiry investigating "Where Math is in our Environment." The students are taking photos on their iPads and then using PicCollage to create visuals showing their understanding. The finished product will be to print off each page and bind it together into a book that can be shared with younger students in the school. For me, PicCollage is a perfect example of how with a little creative thinking you can use an app that was designed for something else and make it work in the classroom to show and share student learning.



Prezi lite

PREZI is available in both computer, online and app versions. I have found that the app version is much more limiting in terms of backgrounds and formats, but I think that this is actually good because it helps students make choices for their work but not get too overwhelmed in the process.

PREZI can be used by students to share their understanding about virtually anything. It's an animated presentation program. I'm using the online version of PREZI today. What I like is that once my teacher account was created, then by logging my students into this account, I can keep track of and see any projects that they create. There are different levels of security with PREZI. I only have the free version and this means that my presentations are PUBLIC. If you want to ensure things are private, then there is a monthly or yearly fee which can get expensive. Knowing that our projects are public, I just make sure that students use photos which don't show any of our faces or any other identifying features.

PREZI can be a bit tricky and picky to work with. I have found that students seem to have an easier time than adults! The students like the way the pages move and slide about. They also love to explore the different backgrounds and formats.



Verbal Me

This easy to use app is a great way to give a vocal voice to students who are reluctant or unable to speak. It has several pre-made choice boards that simply say the words with a tap of the screen. For example, students can share their understanding or ideas by tapping either, "Yes" or "No." They can share feelings to situations by tapping either, "Happy, Sad or Mad." Teachers could create multiple-choice lessons where students would tap their answers by using the "A, B or C" board.



Nearpod

This app has become a way that I can link all of my students and their ipads together in an interactive style of teaching. I can create short lessons or activities by using the Nearpod app. Then by touching the “Live Session” button all of my students can login to the Nearpod app on their own devices and access my lesson or activity by typing in the given PIN. For those of you who have used the online “Kahoot” program, it has a similar feel to it. When creating your Nearpod lessons or activities, there are many options available. You can add different content like slides, pdfs, videos, and audio files. Students will view this content once you make your lesson “live” and they are logged onto their iPad. If you don’t have an AppleTV in your classroom, then this is a perfect alternative. With these lessons, you can also add activities like open-ended questions, polls, quizzes or a draw its. These activities would be done by your students directly on their iPads. You can see the results on your own device. Because I am only using the FREE version of this app, there are many features that are not available. One of these would be result saving. To get around this problem, I simply took a screenshot of every saved testing activity which got saved into my camera roll which I then later sent to my assessment file.

B) Reading and Language Skills Development



Write About FREE

This app has free and paid versions. It has been one of my most favourite apps over the past couple of years. The free version that we are currently using in our class has limited access to writing prompts and photos, which can sometimes be frustrating for a couple of my students. What I really love about this app

though is the ability to easily insert and create writing prompts using your own authentic situations like field trips, special speakers or events at school. I have even begun to have my students create writing prompts for their classmates to complete. What's so incredible about this is that your students' true interests are demonstrated when they have complete ownership over stuff like this. For limited verbal students, this is really amazing! IF you can afford to buy an app, this is one I would highly recommend.



Think About

This writing prompt app was created by students, for students. There are many different categories into which simple writing prompts have been sorted. These writing prompts are read-aloud by the student who created them. As well, the writing prompts are illustrated creating good visual appeal. This app does not allow for actual writing to take place within it. Instead I have students reading the writing prompt on their own iPad and then answering the question in their Personal Writing Books. Lastly, there is a short biography on each of the students and their piece of work. For a free app, this is a good one to use from time to time to encourage student writing.



OnceAppon

This app is a highly engaging writing program that allows to make personal avatars that then become the characters in an animated story. The students get to choose the elements of the story like who the hero will be, his/her preferences, the setting, problems and solutions, and much more. The format is very visual and touch selected so it is easy for students to do. Once you are all done selecting the elements, students have a finished story that can be read aloud to them. Because there are so many different options to choose within this story builder app, students can create multiple stories that are very different from one another. For one of my lower verbal skilled students, this app has quickly become his favourite and he chooses to do it whenever he's given the opportunity.



FarFaria

This is an extensive library of stories that are sorted by different themes. Within a theme, you can then sort the books by reading levels. This is a great feature as you can direct the books that your students choose to read. The books can be read with an auto play (where the story is read aloud and the pages are turned for you), read aloud (and you turn your own pages) or read by myself format. Words are highlighted as the story is read aloud. With the FREE version of this app, you can access and open only one story a day. With the paid version, which is quite costly, you have unlimited access. We have quickly learned that you can keep your one book open and reread it throughout the day. But if you close it, then that's it you have to wait until the next day to open a book again. I have begun to use this app for my morning work with my students. They chose a story within their level, listen/read it and then complete comprehension questions in a booklet that I created.



Sentence Maker FREE

This is a simple photograph picture based app that gives students the opportunity to touch and drag words into sentence order. You can customize the options to make it easier or harder for your students. There will be limitation to the number of activities you can do using the free version.



Read on Sight FREE

This app gives students a simple sentence. It reads the sentence aloud and then when you hit the play button, it scrambles up the words. Students then have to touch and drag the words back down into order. All the words are read aloud every time they are touched, and it will repeat the whole sentence too. One drawback is that

there are no pictures to support sentence understanding so it would be a good next step up in sentence building app.



Comprehension Builder 1 and 2 FREE

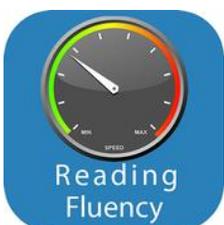
These are picture based apps that gets to students to answer simple comprehension questions based on what they see in the picture. It has chunks of sentences colour coded to help students find the correct answer. Everything is read aloud to support students learning and to help those students who have memory or processing difficulties. Again, the number of activities are limited in these free versions but they are well worth exploring until they have lost their appeal or use.





Fact or Opinion

This app will review, teach and test students' understanding of the difference between facts and opinions. Students are given simple instructions to choose either the fact or the opinion between two sentences. Everything is read aloud and repeated if necessary. With the free version of this app, students will have a limited number of levels to complete.



Reading Fluency

This is an app that can help you to monitor and assess reading fluency skills. Students are given reading passages that increase in difficulty. They are asked to time their reading of each passage by pressing a play and stop

button. This would be an app that teachers and students would use together. Again, with the free version of this app, students will have a limited number of levels that they can access.



World's Worst Pet Vocabulary

This is a highly engaging, story and activity-based game like app that teaches students new vocabulary. It has numerous levels with multiple activities. During each activity, students have access to a teaching coach who will review the meaning of the involved words. This allows students to truly learn these new words and then apply them correctly within a number of contexts. As students complete activities, they earn bones which help feed the World's Worst Pet monster. This app would be great to use in a variety of learning situations like language centers or whole group lessons where the app is projected on the whiteboard. I recently had my students explore it during Morning Work time and they were all engaged and focused. Their only criticism was that it didn't read the word definitions, only the word itself. So for some, this made it a little more difficult than they would like.

Math apps

If your class is like mine, the mathematical needs of your students will be all of the place, especially depending upon the involved concepts. I find you need a diverse backpack of math apps that you carefully think about when downloading onto the students' iPads. I find that math class is even more direct instruction based than my language based classes. In my class, students sit in a horse-shoe shape and we the adults sit across from them. This way you can dialogue 1:1 with the student, looking at their face and responses to get a better feeling of

whether or not they understand the concept. This is a practice I adopted a couple of years ago, based on a math tutoring center that my oldest son attended. In the case of teaching students with autism, it is also a very effective practice that gives everyone the personal space that makes them feel comfortable.

I find that math apps are often being added and so when beginning a new math unit with my students, the first thing I do is explore the App Store. While finding free apps is often difficult, you can find some game-like apps that often introduce or review previously learned concepts. As part of a balanced math program, these apps can be highly motivating for our students.



Front Row Math

The “**FrontRow Math**” app originally started as an online mathematics program. They have expanded now to include apps for all devices and platforms. In general, it is a FREE program. The developer has added features (i.e. create customized tests, pick more specific curriculum) for a cost and which would require a school purchase order. As well, I should qualify that it is an American program so there are some curriculum aspects that are difficult to use (for example: units of measurement). This is my number one “go to” math app as it helps review and teach almost all of the math curriculum that my students need to learn.

In general, my students LOVE using this math program. When given a Free Math Time period, almost all of them will chose to go FrontRow. I think that they really like its interactive, highly visual, auditory supporting and predictable nature. I love it because the kids can show me their understanding without having to verbally explain themselves. I also love that it makes the questions harder as the students show success and easier if they are struggling. This greatly reduces student frustration which can lead to negative student behaviour.

Students work directly on their iPads using the writing features or drop down menu selections. There are “how to” videos for every question that students can watch. I have many students who quite enjoy watching these videos and will unprompted do so when they realize they do not know how to answer the question. Some students need a little more encouragement to do so.

This app also gives me weekly progress reports for my students. I have used these results to help write my report card statements. They give amazing depth to my students' math profiles and I've even shared the results with parents. For a FREE program, it's AMAZING!



BarDiagrams

I have had amazing success with this data management app. It allows students to very easily input data and create either vertical or horizontal bar graphs, as well as line graphs. All of my students quickly grasped how to input data and after one direct instructional style lesson where I used the AppleTV to mirror my iPad in order to show them how to do things step by step, they are all now independent. In my class we track the local weather, as well as weather from another city (the Super Star chooses the destination) and the students then create a variety of comparison style graphs which we discuss. This app is an incredible way to use this data. We all just love it!



Equator

This is a partner style app that asks students to make equations the same. It would be a work together activity between two students, facilitated by an adult in the beginning and then released to work together independently

once the concept was understood and as long as the two students are able to work together. The math content in this app is early understanding of addition and subtraction but is nice because it involves problem-solving rather than just being a drill and kill activity.



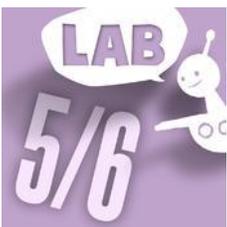
Money (Mathies Learning Tools)

This is a simple app that allows students to select various Canadian bills and coins to represent money amounts. This app could be used in various ways with students, both in large, small and direct instruction settings. It does not give questions to the students but rather provides them with a visual tool to share their understanding. This app is one of many of the “Mathies Learning Tools” created by the Ontario Ministry of Education.



Wings Lite

In this lite version, students will use their iPads to choose the bigger or smaller number in a number of situations like just identifying numbers, looking at base ten visuals, number arrays or multiplication questions. Students will be using their iPads to ‘fly’ to the correct answer so a pre-talk about iPad safety is advised. The paid version of this app will expand the depth of the content.



Oh No Fractions!

This app makes comparing fractions extremely visual and interactive. For those students who are able to learn beyond basic fractions, this is a wonderful teaching app that you can use in small group or direction instruction settings.



Chicken Coop Fractions

A fun game style app that reinforces the learning of proper and improper fractions. In the free version of this app, students will have access to the estimating fractions level. The default mode for this game is timed with quite a frantic background music to it. But you are able to go into the game settings and turn off the timing mode and select mute. I would highly recommend doing this as otherwise it might cause some student stress.



Multiplication Lite

The free version of this app allows students to practice applying their knowledge of multiplication in a game style app. This would be one of those apps that you use for a bit and then move. Make sure to turn off the music before playing as it can become quite annoying and distracting.



Long Division

For students who are able to learn long division, this app is a wonderfully visual learning tool. Each step is clearly taught using words and highlights. The touch and drag format makes activity completion very easy for students. The only problem is that with the free version, you only get 3 questions. To get unlimited questions you have to pay. So this would be one of those free apps that use for a bit and then put back into the cloud for next year.



Autodesk Measurement

This is another app that I highly recommend getting familiar with prior to using with students. It is an interactive, digital app that teaches the international systems of measurement like: linear measurement, perimeter, area, volume, angular measurement, proportion, weight, liquid volume, temperature and multiple variables. It has real-life scenarios in which students will touch and explore in order to learn these concepts. While it lacks the prettiness that most apps have, for concrete math applications it is an interesting app for students to learn with.

Motivational & Other Curriculum Areas

The following apps are those that I use from time to time to engage student learning. They provide students with a fun, informative learning activity. I often use these apps as my Morning Work activity or during what I call, "Free iPad Time."



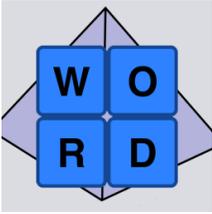
Hyper

A daily digital magazine with links to the 'best' videos of the day. Very popular app with intermediate aged students right now.



WeeMee

Fun, avatar creating app. I use it to create pictures for student writing activities like making inferences or observations.



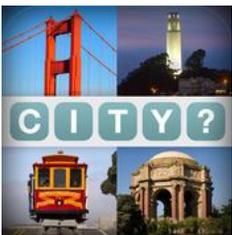
Word Pyramid and Word Circle

Playing with words apps. Engaging, visual and can be highly addictive! 😊



Sink or Float

Simple exploration of items that need to be categorized into either those that float, or those that sink.



City Pic, What Place?

Word puzzle and spelling apps that use well known world landmarks as the clues. Great motivator for getting students to spell new words.



Mini Adventures: Music

Explores different musical instruments through visuals, words, videos and sounds.



News-2-You

PEC symbol created news stories that give age appropriate information in a visually supporting style for those students who need support with reading and understanding. Lite version gives you one free copy of a story about Guide Dogs. Additional stories can be purchased individually or a subscription and access to all stories can be purchased.

The following are apps that I am currently using with my grade 6-8 students to help reinforce their learning in the areas of: Animal Classification, Flight, Structures, Human Body Systems and Cells. I am only using the free versions of all of these apps. Some of them do contain paying features. They are all worth letting the students explore throughout their units of learning.



The Art & Science of Birds



Classify It!



Owls & Bats



Explore Human Body – Anatomy for Kids (Lite)



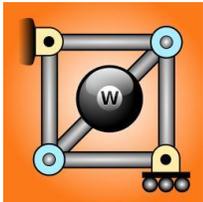
My Body Parts (Senses, Organs)



Houses 3D Free



Hardened Structures



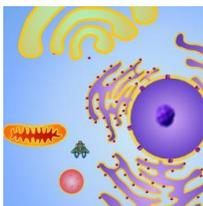
Truss Me!



Bridge Maker Lite



World Tallest Buildings



The Cell Explorer: The Animal Cell (Free)



Parts of Plants



Naming the Parts of Plants and Animals

Classroom Communication and Behaviour Management Tool



iOS and Android App AND Internet Website -- FREE

This program is the number one way that I encourage the development of positive classroom management and communicate with parents. It very clearly allows students, teachers and parents to see exactly both positive and negative behaviours that are happening in the classroom or school. Goals can be customized to be as authentic and useful as possible. They are easily changed. I even have students themselves now requesting a specific goal so that they can get positive recognition for their efforts -- for example: "Being Brave." With a recent update, you can now 'weight' the points in order to help encourage students to buy into a behaviour change.

I always try to stay positive and reward the positive behaviours that I see as much as possible. It's hard sometimes to do this so I recommend having the program open on your computer or iPad during the school day for easy access. In my class, it's often projected up on the screen so that it's a constant reminder for everyone. Both my TAs and myself take responsibility for rewarding students for their positive behaviours immediately so that it is more meaningful than if it is done after the fact.

In my class, the students and I brainstormed a number of prizes and then determined how many DOJO Points would be needed to achieve these different prizes. Students then set their own goals and we keep track on a visual chart on the board, as well as writing the actual number of points needed with their name and avatar. Once a goal is achieved we try to give the reward as soon as possible in order to keep up the student's motivation. In my class, I do not allow students to change their mind mid-way through achieving a goal.

As a teacher, I print off weekly reports for each of my students. I keep these reports in a binder and then use these to help at report card writing or meeting times. Once parents are invited to join, they too receive weekly reports OR they can login during the day and see how their child is doing.

I use the Class DOJO as a messaging system with parents. It allows for instant messaging between home and school. This is something that you need to consider as a teacher and communicate the expectations that you need to have, (For example, not communicating on evenings or weekends). The program has a section that allows you to send out "Whole Group Messages" as well as individual messages. It also has an option called "Class Story" where you can post pictures and videos, and parents can then like it. It has an almost "Instagram" feel to it but it's kept just within those parents that are attached to your class.

New this year, the ClassDOJO site has created short videos that address the current educational concept of "Fixed versus Growth Mindsets." These videos are a wonderful way to help explain this concept to students and I highly encourage you to check them out.

THANK YOU for attending my workshop.

Feel free to contact me at: erica.glover@peelsb.com