









Math App Guide | Collaboration and Critical Thinking





Engaging 2C Learning: Developing Critical Thinking and Collaboration in the 21st Century Mathematics Classroom

TLLP 2014-2015: Cardinal Ambrozic C.S.S.


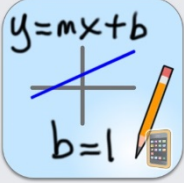
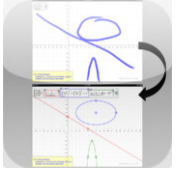
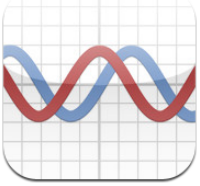
Collaboration, Communication and Creativity Apps


App Name	Description	SAMR	Cost	Topic	Link
VoiceThread 	<p>Create and share dynamic conversations around documents, snapshots, diagrams and videos -- basically anything there is to talk about. You can talk, type, and draw right on the screen. VoiceThread takes your conversations to the next level, capturing your presence, not just your comments. Anyone can join the discussion from their iPhone, iPad, iPod touch, Mac or PC -- anytime, anywhere.</p>	REDEFINITION	FREE	Collaboration, Communication	https://itunes.apple.com/ca/app/voicethread/id465159110?mt=8
Doceri 	<p>Combining screencasting, desktop control, and an interactive whiteboard in one app, you'll never have to turn your back to the class or audience again. Doceri does it all!</p>	REDEFINITION	FREE	Remote Desktop	https://itunes.apple.com/ca/app/doceri/id412443803?mt=8
Nearpod 	<p>The Nearpod platform enables teachers to use their iPads to manage content on students' iPads, iPhones or iPods. It combines presentation, collaboration, and real-time assessment tools into one integrated solution.</p> <p>Before You Start Nearpod is a synchronous solution for the use of iPads, iPods and iPhones in the classroom. To try Nearpod, you will need one iPad and at least one other device (iPad, iPhone, or iPod touch), both running Nearpod. All devices should be connected to the Internet.</p>	REDEFINITION	FREE	Collaboration	https://itunes.apple.com/ca/app/nearpod/id523540409?mt=8

<p>Educreations</p> 	<p>Educreations turns your iPad into a recordable whiteboard. Creating a great video tutorial is as simple as touching, tapping and talking. Explain a math formula... Create an animated lesson... Add commentary to your photos... Diagram a sports play...</p>	<p>REDEFINITION</p>	<p>FREE</p>	<p>Communication, Collaboration</p>	<p>https://itunes.apple.com/ca/app/educrations-interactive-whiteboard/id478617061?mt=8</p>
<p>iMovie</p> 	<p>Make beautiful HD movies anywhere with iMovie, the fast and fun moviemaking app that puts everything you need to tell your story at your fingertips. Browse and play projects in the Marquee view. Create Hollywood-style trailers or sophisticated home movies in minutes.* And share your finished projects with the world – right from iMovie.</p>	<p>REDEFINITION</p>	<p>\$4.99</p>	<p>Communication, Collaboration</p>	<p>https://itunes.apple.com/ca/app/imovie/id377298193?mt=8</p>
<p>Google Drive</p> 	<p>Google Drive is one safe place for all your stuff. Upload photos, videos, documents, and other files that are important to you, then access what you need wherever you go, on any device. Get going with up to 15GB of storage. Free.</p>	<p>SUBSTITUTION</p>	<p>FREE</p>	<p>Collaboration, File Sharing</p>	<p>https://itunes.apple.com/us/app/google-drive/id507874739?mt=8&ign-mpt=uo%3D4</p>
<p>SMART Bridgit</p> 	<p>With the Bridgit app, you can collaborate effortlessly with local and remote meeting participants*. Use the app with your SMART Board interactive whiteboard or display to view content that is being presented and highlight or annotate over that content. You can create or join a meeting on your iPad with either a wi-fi or cellular network connection.</p>	<p>REDEFINITION</p>	<p>FREE</p>	<p>Collaboration</p>	<p>https://itunes.apple.com/ca/app/bridgit/id433502122?mt=8</p>
<p>ShowMe Interactive Whiteboard</p> 	<p>Turn your iPad into your personal interactive whiteboard!</p> <p>ShowMe allows you to record voice-over whiteboard tutorials and share them online. It's an amazingly simple app that anyone can use, no matter how young or old!</p>	<p>REDEFINITION</p>	<p>FREE</p>	<p>Communication</p>	<p>https://itunes.apple.com/us/app/showme-interactive-whiteboard/id445066279?mt=8</p>

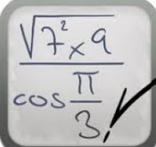
 <p>Prezi</p>	<p>Create, edit, present, and share your prezis anywhere with simple, intuitive multi touch gestures. Drag to pan and pinch to zoom in or out of topics, just like you do in any map apps. Revise and retouch your prezis, correct typos and adjust your presentation on-the-fly. Prezi for iPad is the perfect companion to your Prezi experience.</p>	<p>REDEFINITION</p>	<p>FREE</p>	<p>Communication, Presentation</p>	<p>https://itunes.apple.com/ca/app/prezi-for-ipad/id407759942?mt=8</p>
 <p>Dropbox</p>	<p>Dropbox lets you bring all your photos, docs, and videos anywhere and share them easily. Access any file you save to your Dropbox from all your computers, iPhone, iPad and even the Dropbox website!</p>	<p>SUBSTITUTION</p>	<p>FREE</p>	<p>Collaboration, Storage</p>	<p>https://itunes.apple.com/en/app/dropbox/id327630330?mt=8</p>
 <p>Explain Everything</p>	<p>Explain Everything is an easy-to-use design, screencasting, and interactive whiteboard tool that lets you annotate, animate, narrate, import, and export almost anything to and from almost anywhere.</p> <p>Create slides, draw in any color, add shapes, add text, and use a laser pointer. Rotate, move, scale, copy, paste, clone, and lock any object added to the stage.</p>	<p>REDEFINITION</p>	<p>\$2.99</p>	 <p>Communication, Collaboration</p>	<p>https://itunes.apple.com/ca/app/explain-everything/id431493086?mt=8</p>

Graphing Apps


App Name	Description	SAMR	Cost	Topic	Link
 TI-Nspire CAS	Texas Instruments, the No. 1 recommended brand in graphing calculators, now offers its most powerful handheld technology in an all-in-one Computer Algebra System (CAS) app for iPad that makes teaching and learning math more engaging, meaningful and ... fun!	SUBSTITUTION	\$29.99	Graphing, Computer Algebra System, Geometry	https://itunes.apple.com/ca/app/ti-nspire-cas/id545351700?mt=8
 FluidMath	At http://www.fluidmath.net webFluidMath brings handwritten math, computation, and graphing to users of iPads, Macs, Microsoft Windows, Tablet PCs and Interactive Whiteboards through a web	MODIFICATION	FREE	Graphing	https://itunes.apple.com/ca/app/fluidmathfree/id594266234?mt=8
 Sketch2Graph	Sketch2Graph is an educational math app. Use it to learn more about the relationship between the graphical and algebraic representation of math expressions. In most graphing apps you provide a math expression and get a graph. With Sketch2Graph it is the opposite-- you draw a graph and get back math that represents what you drew.	MODIFICATION	FREE	Graphing Tool	https://itunes.apple.com/ca/app/sketch2graph/id580757471?mt=8
 Desmos	Explore math with Desmos! Graph functions, evaluate equations, explore transformations, plot points, and more – for free!	AUGMENTATION	FREE	Graphing	https://itunes.apple.com/ca/app/desmos-graphing-calculator/id653517540?mt=8

 <p>QuickGraph</p>	<p>Quick Graph is the best graphic calculator available on the AppStore!</p> <p>It is a powerful, high quality, graphic calculator that takes full advantage of the multitouch display and the powerful</p>	<p>AUGMENTATION</p>	<p>FREE</p>	<p>Graphing</p>	<p>https://itunes.apple.com/ca/app/quick-graph-your-scientific/id292412367?mt=8</p>
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Calculator Apps




App Name	Description	SAMR	Cost	Topic	Link
 <p>Myscript Calculator</p>	<p>With MyScript© Calculator, perform mathematical operations naturally using your handwriting.</p>	<p>AUGMENTATION</p>	<p>FREE</p>	<p>Calculator</p>	<p>https://itunes.apple.com/ca/app/myscript-calculator/id578979413?mt=8</p>

Algebra Apps





App Name	Description	SAMR	Cost	Topic	Link
 <p>Algebra Touch</p>	<p>Have you forgotten most of your algebra? Algebra Touch will refresh your skills using touch-based techniques built from the ground up for your iPhone/iPad/iPod Touch.</p>	<p>MODIFICATION</p>	<p>\$2.99</p>	<p>Practice, BEDMAS, Algebra, Equations</p>	<p>https://itunes.apple.com/ca/app/algebra-touch/id384354262?mt=8</p>







Note Taking and Mind Mapping Apps

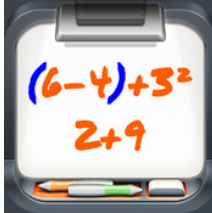





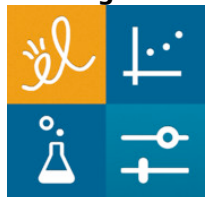

App Name	Description	SAMR	Cost	Topic	Link
 <p>SMART Notebook</p>	<p>The SMART Notebook app for iPad is a light version of SMART Notebook collaborative learning software. Using this app, you can create basic multimedia files and complete SMART Notebook lesson activities. You can use the app for individual and collaborative learning with an iPad, and you can use SMART Notebook software with a SMART Board</p>	SUBSTITUTION	\$6.99	Note taking, Collaboration	https://itunes.apple.com/ca/app/smart-notebook-app-for-ipad/id554245373?mt=8
 <p>Inspiration Lite</p>	<p>Work with up to five diagrams to create maps, edit and stylize content, transform diagrams to outlines, and preview templates. ---> For unlimited diagrams that you can export to Inspiration 9.1, use with other apps, and share with others: upgrade to Inspiration Maps, the visual thinking and learning application for the iPad. Students build their knowledge by creating diagrams, maps and organizers that help them brainstorm, plan, organize and build thinking skills. Tap to transform visual work into outlines that export for writing. Use Inspiration Maps to:</p>	REDEFINITION	FREE	Mind Mapping	https://itunes.apple.com/ca/app/inspiration-maps-lite/id510031612?mt=8
 <p>ShowMe Interactive Whiteboard</p>	<p>Turn your iPad into your personal interactive whiteboard!</p> <p>ShowMe allows you to record voice-over whiteboard tutorials and share them online. It's an amazingly simple app that anyone can use, no matter how young or old!</p>	AUGMENTATION	FREE	Communication	https://itunes.apple.com/us/app/show-me-interactive-whiteboard/id445066279?mt=8





 <p>Prezi</p>	<p>Create, edit, present, and share your prezis anywhere with simple, intuitive multi touch gestures. Drag to pan and pinch to zoom in or out of topics, just like you do in any map apps. Revise and retouch your prezis, correct typos and adjust your presentation on-the-fly. Prezi for iPad is the perfect companion to your Prezi experience.</p>	<p>REDEFINITION</p>	<p>FREE</p>	<p>Communication, Presentation</p>	<p>https://itunes.apple.com/ca/app/prezi-for-ipad/id407759942?mt=8</p>
 <p>MindMeister</p>	<p>*** MindMeister is the companion app of the #1 collaborative mind mapping site MindMeister.com ***</p>	<p>REDEFINITION</p>	<p>FREE</p>	<p>Mind Mapping, Collaboration</p>	<p>https://itunes.apple.com/ca/app/mindmeister-mind-mapping/id381073026?mt=8</p>
 <p>Popplet Lite</p>	<p>Great for work. Great for school. Popplet is a platform for your ideas. Popplet's super simple interface allows you to move at the speed of your thoughts. With Popplet you can capture your ideas and sort them visually in realtime. Quickly and easily!</p>	<p>REDEFINITION</p>	<p>FREE</p>	<p>Mind Mapping, Collaboration</p>	<p>https://itunes.apple.com/ca/app/popplet-lite/id364738549?mt=8</p>

Manipulatives and Math Tools


App Name	Description	SAMR	Cost	Topic	Link
 Clinometer HD	With this tool, the slope can be measured by all edges of the device in every direction. When the device is put flat on the table a bubble view will fade in.	AUGMENTATION	FREE	Manipulative, Clinometer	https://itunes.apple.com/ca/app/clino-meter-hd-bubble-level/id364877623?mt=8
 Geoboard	The Geoboard is a tool for exploring a variety of mathematical topics introduced in the elementary and middle grades. Learners stretch bands around pegs to form line segments and polygons and make discoveries about perimeter, area, angles, congruence, fractions, and more.	SUBSTITUTION	FREE	Manipulative, Geoboard	https://itunes.apple.com/ca/app/geoboard-by-math-learning/id519896952?mt=8
 Easy Measure	EasyMeasure shows you the distance to objects seen through the camera lens of your iPhone or iPad. Simply aim your iPhone/iPad to any object in your surroundings, and EasyMeasure displays the distance towards that object on top of the camera image. With its amazing 3D camera overlay grid, using EasyMeasure is very intuitive and easy!	AUGMENTATION	FREE	Manipulative, Metre Stick	https://itunes.apple.com/ca/app/easy-measure-measure-your-camera!/id349530105?mt=8
 Angle Meter (FREE)	Angle Meter is an accurate angle (from the surface of the earth) measurement tool.	AUGMENTATION	FREE	Manipulative, Level	https://itunes.apple.com/ca/app/angle-meter-free/id436775826?mt=8

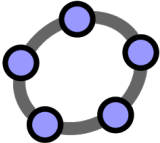



 <p>Angle Meter HD Lite</p>	<p>Do you need to measure angles with your device?</p>	<p>AUGMENTATION</p>	<p>FREE</p>	<p>Manipulate, Level</p>	<p>https://itunes.apple.com/ca/app/angle-meter-hd-lite/id443346113?mt=8</p>
 <p>Virtual Manipulatives!</p>	<p>I have provided a virtual set of fraction bars on www.abcya.com for several years. Many teachers have contacted me about creating a similar application for the iPad. Here it is! I offer this app for free because virtual manipulatives alone do not provide meaning for learners; they require a teacher to guide meaning and connections.</p>	<p>SUBSTITUTION</p>	<p>FREE</p>	<p>Manipulative, fraction bars</p>	<p>https://itunes.apple.com/ca/app/virtual-manipulatives!/id471341079?mt=8</p>
 <p>Algebra Tiles</p>	<p>Virtual manipulative algebra tiles for hands-on exploration of algebraic concepts.</p>	<p>AUGMENTATION</p>	<p>\$0.99</p>	<p>Manipulative </p>	<p>https://itunes.apple.com/ca/app/algebra-tiles/id568896224?mt=8</p>
 <p>Solving Equations</p>	<p>Everything you need for teaching and learning: (1) Narrated lesson (2) Practice questions (3) Virtual manipulative (4) Challenging game</p>	<p>AUGMENTATION</p>	<p>\$0.99</p>	<p>Manipulative </p>	<p>https://itunes.apple.com/ca/app/solving-equations/id522498600?mt=8</p>

<p>Order of Operations</p> 	<p>★ CONCEPTS LEARNED ★</p> <ol style="list-style-type: none"> 1. Understand that Order of Operations gives the rules for the correct order when performing operations 2. Appreciate why Order of Operations is important 3. Evaluate expressions by operating on parentheses first, then exponents, then performing multiplication or division from left to right, and finally performing addition or subtraction from left to right 	AUGMENTATION	\$0.99	Manipulative 	https://itunes.apple.com/ca/app/order-operations-by-brainiac/id515299769?mt=8
<p>Teaching Table Lite</p> 	<p>Use our math manipulatives to create customized and dynamic lessons.</p> <p>Teaching Table Lite provides educators and parents with interactive manipulatives to teach math concepts and guide</p>	AUGMENTATION	FREE	Manipulative 	https://itunes.apple.com/ca/app/teaching-table-lite/id562246923?mt=8
<p>5 Dice: Order of Operations Game</p> 	<p>Two Player Bluetooth Math Game! You can now use two devices and play against your classmates or parents.</p> <p>A math game intended for upper elementary and middle school students that helps students enjoy practicing their</p>	MODIFICATION	FREE	Game 	https://itunes.apple.com/ca/app/5-dice-order-operations-game/id572774867?mt=8
<p>Gizmos by ExploreLearning</p> 	<p>The ExploreLearning Gizmo app allows you to use selected Gizmos right on your iPad! Login with your Gizmos username and password to get started.</p> <p>TLLP: Gizmos is Ministry licensed. Students are already on the gizmos database. This app allows gizmos to run on an iPad</p>	MODIFICATION	FREE	Manipulatives 	https://itunes.apple.com/ca/app/gizmos/id692838319?mt=8




 <p>Think 3D</p>	<p>Explore and interact with 3D shapes on a screen like you never have before.</p> <p>Fun for 3D fans of any age.</p>	<p>MODIFICATION</p>	<p>\$0.99</p>	<p>Manipulatives</p> 	<p>https://itunes.apple.com/ca/app/think-3d/id446608416?mt=8</p>
 <p>iMathematics</p>	<p>iMathematics is the best app on AppStore for the study of mathematics! With more than 120 topics, over 1000 formulas, attractive interface, with 7 solvers and calculators, and a special version for iPad! Try it for free, if you like it you can buy iMathematics Pro!</p> <p>TLLP: Great math reference app. Look up terms and formulas</p>	<p>SUBSTITUTION</p>	<p>FREE</p>	<p>Reference</p> 	<p>https://itunes.apple.com/ca/app/imathematics/id337535181?mt=8</p>

Geometry Apps


App Name	Description	SAMR	Cost	Topic	Link
 <p>Geometer's Sketchpad</p>	<p>Drag, manipulate and animate visual mathematics to develop and generalize your understanding of fundamental concepts across elementary math, geometry, algebra, trigonometry, calculus, and beyond. Based on the award-winning software The Geometer's Sketchpad®, the Sketchpad Explorer app allows you to interact with, and investigate, any document created in Sketchpad. With a simple, powerful multitouch interface, Sketchpad Explorer puts mathematical comprehension at your fingertips.</p>	<p>SUBSTITUTION</p>	<p>FREE</p>	<p>GSP</p>	<p>https://itunes.apple.com/ca/app/sketchpad-explorer/id452811793?mt=8</p>

<p>Geogebra</p> 	<p>GeoGebra (www.geogebra.org) is free dynamic mathematics software for all levels of education that brings together geometry, algebra, spreadsheets, graphing, statistics and calculus in one easy-to-use package. Interactive learning, teaching and evaluation resources created with GeoGebra can be shared and used by everyone at www.geogebraTube.org.</p> <p>TLLP: A great substitute and better than Geometer's Sketchpad. A FULL functioning Dynamic Geometry Package (unlike Geometer's sketchpad)</p>	<p>AUGMENTATION</p>	<p>FREE</p>	<p>Geometry</p> 	<p>https://itunes.apple.com/us/app/geogebra/id687678494?mt=8</p>
<p>Sketchometry</p> 	<p>sketchometry is an interactive construction and exploration tool for plane Euclidean geometry. Points, circles and lines can be sketched on the screen with fingers or stylus.</p> <p>TLLP: Geometry App</p>	<p>AUGMENTATION</p>	<p>FREE</p>	<p>Geometry</p> 	<p>https://itunes.apple.com/us/app/sketchometry/id635195332?mt=8</p>



Miscellaneous Apps

App Name	Description	SAMR	Cost	Topic	Link
NASA Visualization Explorer 	<p>NASA SCIENCE: REVEALED! This is the NASA Visualization Explorer, the coolest way to get stories about advanced space-based research delivered right to your iPad. A direct connection to NASA's extraordinary fleet of research spacecraft, this app presents cutting edge research stories in an engaging and exciting format. See the Earth as you've never seen it before; travel to places otherwise unavailable to even the most intrepid explorers! Download it now, tap into the power of NASA's cutting-edge research today and check for new stories every week!</p>	REDEFINITION	FREE	NASA Space	https://itunes.apple.com/ca/app/nasa-visualization-explorer/id448700202?mt=8
Chrome 	<p>Browse fast with Chrome, now available on your iPhone, iPod touch and iPad. Sign in to sync your personalized Chrome experience from your computer, and bring it with you anywhere you go.</p>	AUGMENTATION	FREE	Browser	https://itunes.apple.com/ca/app/chrome/id535886823?mt=8
QRReader 	<p>Fast and effective. App opens instantly in real-time scanning mode.</p>	AUGMENTATION	FREE	QR Reader	https://itunes.apple.com/ca/app/qr-reader-for-ipad/id426170776?mt=8





Assessment

App Name	Description	SAMR	Cost	Topic	Link
eClicker Audience 	<p>Anyone who sits through presentations or lectures knows a little interactivity makes everything more memorable. And more fun. Hence: eClicker Audience. The companion app to eClicker Presenter, eClicker Audience lets you see and answer questions a teacher, speaker or moderator sends to your iOS device. The app is free and available in the App</p>	AUGMENTATION	FREE	Assessment	https://itunes.apple.com/us/app/eclicker-audience/id520556451?mt=8

Data Collection

App Name	Description	SAMR	Cost	Topic	Link
eClicker Audience 	<p>Students can use the new PASPORT AirLink 2 Bluetooth interface to connect to over 70 PASCO sensors, measuring a wide range of phenomena, including pH, temperature, force, carbon dioxide level, and many more.</p> <p>TLLP: Needed to collect data for mathematic analysis and graphing</p>	AUGMENTATION	FREE	Data Collection 	https://itunes.apple.com/us/app/sparkvue/id361907181?mt=8

Apple Apps for Productivity and Creativity

Name	Description	Link/Platform	Cost	SAMR
<p>Pages</p> 	<p>Pages is a productivity word processor</p> <p>TLLP: Word Processor</p>	<p>https://itunes.apple.com/ca/app/pages/id361309726?mt=8</p>	<p>FREE</p>	<p>Substitution Word Processor</p>
<p>Keynote</p> 	<p>Keynote is a productivity presentation app</p> <p>TLLP: Presentation</p>	<p>https://itunes.apple.com/ca/app/keynote/id361285480?mt=8</p>	<p>FREE</p>	<p>Substitution Presentation</p>
<p>Numbers</p> 	<p>Keynote is a productivity spreadsheet app</p> <p>TLLP: Spreadsheet</p>	<p>https://itunes.apple.com/ca/app/numbers/id361304891?mt=8</p>	<p>FREE</p>	<p>Substitution Spreadsheet</p>
<p>GarageBand</p> 	<p>Garageband allows students to create, modify and edit sounds</p> <p>TLLP: Creating sounds for video files</p>	<p>https://itunes.apple.com/ca/app/garageband/id408709785?mt=8</p>	<p>FREE</p>	<p>Redefinition Audio</p>